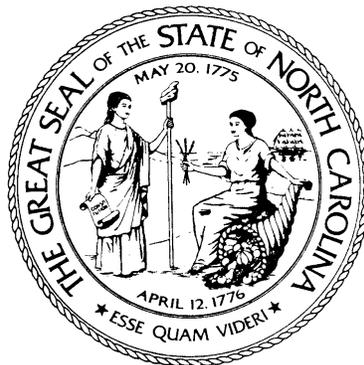


**ANNUAL REPORT REGARDING  
RENEWABLE ENERGY AND ENERGY EFFICIENCY  
PORTFOLIO STANDARD IN NORTH CAROLINA**

**REQUIRED PURSUANT TO G.S. 62-133.8(j)**

**DATE DUE:           OCTOBER 1, 2011  
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THE GOVERNOR OF NORTH CAROLINA  
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COMMISSION ON GOVERNMENTAL OPERATIONS**



**SUBMITTED BY  
THE NORTH CAROLINA UTILITIES COMMISSION**

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# EXECUTIVE SUMMARY

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In August 2007, North Carolina enacted comprehensive energy legislation, Session Law 2007-397 (Senate Bill 3), which, among other things, established a Renewable Energy and Energy Efficiency Portfolio Standard (REPS), the first renewable energy portfolio standard in the Southeast. Under the REPS, all electric power suppliers in North Carolina must meet an increasing amount of their retail customers' energy needs by a combination of renewable energy resources (such as solar, wind, hydropower, geothermal and biomass) and reduced energy consumption. Pursuant to G.S. 62-133.8(j), the Commission is required to report by October 1 of each year to the Governor, the Environmental Review Commission, and the Joint Legislative Commission on Governmental Operations on the activities taken by the Commission to implement, and by electric power suppliers to comply with, the REPS requirement.

## 2011 Legislation

During the 2011 Session of the General Assembly, the legislature enacted two amendments to Senate Bill 3.

First, Session Law 2011-55 (Senate Bill 75) amended G.S. 62-133.8(a) by adding a new subdivision (3a) defining "electricity demand reduction" and adding G.S. 62-133.8(b)(2)(g) and (c)(2)(g) to include electricity demand reduction as a means by which an electric power supplier can meet its REPS obligation.

Second, Session Law 2011-309 (Senate Bill 710) amended G.S. 62-133.8(f) by adding language that allows electric power suppliers to use renewable energy certificates (RECs) derived from the thermal energy of a combined heat and power facility that uses poultry waste as a fuel to meet the REPS poultry waste set-aside requirement.

## Commission Implementation

### *Rulemaking proceeding*

Immediately after Senate Bill 3 was signed into law, the Commission initiated a proceeding in Docket No. E-100, Sub 113 to adopt rules to implement the REPS and other provisions of the new law. On February 29, 2008, the Commission issued an Order adopting final rules implementing Senate Bill 3.

Since issuing this Order, the Commission has issued a number of orders interpreting various REPS provisions, including the following orders issued and other actions taken since October 1, 2010:

- On November 23, 2010, in Docket No. E-100, Sub 113, in response to a Joint Motion by numerous electric power suppliers, the Commission issued a Declaratory Order on cost recovery for the purchase of renewable energy by electric public utilities when the purchase of energy does not include the renewable energy certificates (RECS) associated with the production of the energy. The Commission held that an electric public utility can recover through its fuel cost rider the total delivered cost of the purchase of energy generated by a swine or poultry waste-to-energy facility where the RECS associated with the production of the energy are purchased by another North Carolina electric power supplier to comply with the REPS statewide swine and poultry waste set-aside requirements.
- On January 31, 2011, in Docket No. E-100, Sub 113, the Commission issued an Order amending Commission Rule R8-64 through R8-69, and approving final Operating Procedures for the North Carolina Renewable Energy Tracking System (NC-RETS).

In addition, on August 24, 2010, in Docket No. E-100, Sub 113, the Commission issued an Order requesting comments on measurement and verification (M&V) of the amounts of reduced energy consumption reported and used for REPS compliance, especially with regard to energy efficiency and demand-side management activities of electric membership corporations and municipal power suppliers. Numerous parties filed comments and reply comments.

Also, on August 25, 2010, in Docket No. E-100, Sub 113, the Commission issued an Order requesting that the Public Staff convene a working group of technical experts and other interested stakeholders and make recommendations to the Commission regarding the appropriate assumptions and methodology for reasonably estimating the useful thermal energy produced by an unmetered solar thermal facility and the number of RECs earned by that facility. The Public Staff has facilitated several meetings of the working group and filed two reports on the working group's recommendations.

### *Renewable energy facilities*

Senate Bill 3 defines certain electric generating facilities as "renewable energy facilities" or "new renewable energy facilities." RECs associated with electric or thermal power generated at such facilities may be used by electric power suppliers to comply with the REPS requirement as provided in G.S. 62-133.8(b) and (c).

In its rulemaking proceeding, the Commission adopted rules providing for certification or report of proposed construction and registration of renewable energy facilities and new renewable energy facilities. As of July 27, 2011, the

Commission has accepted registration statements filed by 337 facilities. A list of these facilities may be found on the Commission's website at [www.ncuc.net](http://www.ncuc.net).

The Commission has issued a number of orders since October 1, 2010 addressing issues related to the registration of a facility, such as the definition of "renewable energy resource," including the following:

- On October 8, 2010, in Docket No. E-100, Sub 113, the Commission issued an order denying a request by Peregrine Biomass Development Company, LLC, to allow thermal RECs to be used to meet the swine and poultry waste set-aside requirements.
- On October 11, 2010, in Docket Nos. E-7, Subs 939 and 940, the Commission accepted for registration as renewable energy facilities Duke Energy Carolinas' Buck and Lee Steam Stations, and concluded that primary harvest wood products, including wood chips from whole trees, are "biomass resources" and "renewable energy resources" under G.S. 62-133.8(a)(8).
- On April 18, 2011, in Docket No. SP-100, Sub 28, the Commission issued an Order on Request for Declaratory Ruling concluding that yard waste and the percentage of refuse-derived fuel (RDF) used by ReVenture Park Investments I, LLC (ReVenture), as fuel are renewable energy resources and that the percentage of synthesis gas (Syngas) produced from yard waste and RDF used by ReVenture as fuel is a renewable energy resource.
- On July 5, 2011, in Docket Nos. SP-100, Sub 9 and SP-967, Sub 0, the Commission issued an Order accepting as a new renewable energy facility the planned addition by Raleigh Steam Producers, LLC, and Wake Gas Producers, LLC, of three electric generators to produce combined heat and power from landfill gas.
- On August 15, 2011, in Docket Nos. RET-4, Sub 5 and RET-8, Subs 12, 13 and 14, the Commission issued Orders accepting registration of residential solar thermal water heating facilities on 1,129 homes at the U.S. Marine Corps Camp Lejeune in Jacksonville, North Carolina, allowing a representative sample of the homes to be metered to determine the number of Btus of thermal energy and metered solar thermal RECs that will be produced by the 1,129 systems.

#### *North Carolina Renewable Energy Tracking System (NC-RETS)*

Pursuant to G.S. 62-133.8(k), enacted in 2009, the Commission was required to develop, implement, and maintain an online REC tracking system no

later than July 1, 2010, in order to verify the compliance of electric power suppliers with the REPS requirements.

On February 2, 2010, after evaluating the bids received in response to a request for proposals, the Commission signed a Memorandum of Agreement (MOA) with APX, Inc. (APX), to develop and administer an online REC tracking system for North Carolina, the North Carolina Renewable Energy Tracking System (NC-RETS). APX successfully launched NC-RETS on July 1, 2010, and by letter dated September 3, 2010, the Commission accepted the system and authorized APX to begin billing users pursuant to the MOA.

RECS have been successfully created by and imported into NC-RETS, and the electric power suppliers have used the system to demonstrate compliance with the 2010 REPS solar set-aside requirement.

### *Environmental impacts*

The Commission has not identified, nor has it received from the public or the North Carolina Department of Environment and Natural Resources (DENR), any comments regarding direct, secondary, and cumulative environmental impacts of the implementation of the REPS provisions of Senate Bill 3. DENR noted that there continues to be interest in the development of renewable energy resources and the REPS appears to have spurred much of this interest.

## **Electric Power Supplier Compliance**

Pursuant to Senate Bill 3, electric power suppliers are required, beginning in 2012, to meet an increasing percentage of their retail customers' energy needs by a combination of renewable energy resources and energy reductions from the implementation of energy efficiency and demand-side management measures. In addition, as of 2010, each electric power supplier must meet a certain percentage of its retail electric sales with solar RECs from certain solar facilities.

### *Monitoring compliance with REPS requirement*

Monitoring by the Commission of compliance with the REPS requirement of Senate Bill 3 is accomplished through the annual filing by each electric power supplier of an REPS compliance plan and an REPS compliance report. Pursuant to Commission Rule R8-67(b), on or before September 1 of each year, each electric power supplier is required to file with the Commission an REPS compliance plan providing specific information regarding its plan for complying with the REPS requirement of Senate Bill 3. Pursuant to Commission Rule R8-67(c), each electric power supplier is required to annually file with the Commission an REPS compliance report. While an REPS compliance plan is a forward-looking forecast of an electric power supplier's REPS requirement and its plan for meeting that requirement, an REPS compliance report is an annual look back at the RECs earned or purchased and energy savings actually realized

during the prior calendar year and the electric power supplier's compliance in meeting its REPS requirement.

### *Cost recovery rider*

G.S. 62-133.8(h) authorizes each electric power supplier to establish an annual rider up to an annual cap to recover the incremental costs incurred to comply with the REPS requirement and to fund certain research. Commission Rule R8-67(e) establishes a procedure under which the Commission will consider approval of an REPS rider for each electric public utility. The REPS rider operates in a manner similar to that employed in connection with the fuel charge adjustment rider authorized in G.S. 62-133.2 and is subject to an annual true-up.

### *Electric public utilities*

#### Progress Energy Carolinas, Inc.

In its 2011 REPS compliance plan, PEC stated that its overall compliance strategy is to meet the REPS requirement with the most cost-effective and reliable renewable energy resources available. PEC has adopted a competitive bidding process for the purchase of energy or RECs from renewable energy facilities whereby market participants have an opportunity to propose projects on a continuous basis. Through this RFP, PEC has executed fifty (50) contracts for solar, hydro, biomass, landfill gas, and wind RECs. In addition, PEC and other participants in a state-wide collaborative have executed two contracts for swine waste-to-energy RECs and continue to negotiate with other potential suppliers, PEC stated that it is committed to taking all actions necessary to comply with the swine and poultry waste set-aside requirements. However, PEC stated that it is doubtful that there will be sufficient energy derived from swine waste within the state to enable PEC to meet the 2012 swine waste set-aside requirement. Similarly, although PEC has executed one contract for poultry waste RECs, PEC cautions that it is uncertain whether there will be sufficient poultry waste facilities in operation to enable PEC to meet the 2012 obligation.

In its 2010 REPS compliance report, filed on June 3, 2011, in Docket No. E-2, Sub 1000, PEC indicated that it acquired sufficient solar RECs to meet the 2010 requirement of 0.02% of its 2009 retail sales. Further, PEC stated that counting banked RECs, energy efficiency projections, contracted future purchases, and the ability to use 25% out-of-state RECs each year, it expects to have sufficient RECs to achieve REPS compliance through 2014.

On November 15, 2010, the Commission issued an Order approving PEC's Residential Service SunSense Solar Rebate Rider SSR-1 (SunSense). SunSense is an experimental solar photovoltaic (PV) rebate program under which residential customers who install rooftop solar PV generating systems will receive a one-time participation payment of \$1,000 per kW of installed capacity and monthly bill credits based on the RECs produced by their system. The solar

RECs will be the property of PEC. The Commission previously approved a similar SunSense PV program for commercial customers. PEC implemented the commercial PV program in July 2009 with a target of adding 5 MW of grid-tied solar PV per year and a standard offer to purchase commercial solar hot water RECs to promote development of this technology.

On November 17, 2010, the Commission issued an Order in Docket No. E-2, Sub 974 approving an REPS charge of \$0.58 per month for residential customers, \$2.90 per month for commercial customers, and \$28.93 per month for industrial customers, each of which is below the incremental cost cap established in G.S. 62-133.8(h). In addition, the Commission approved PEC's 2009 REPS compliance report. A hearing was held on PEC's 2010 REPS compliance report and 2011 REPS cost recovery rider on September 27, 2011. A final decision is pending before the Commission.

#### Duke Energy Carolinas, LLC

In its 2011 REPS compliance plan, Duke stated that it is building a diverse portfolio of cost-effective renewable energy and energy efficiency resources. Specifically, the key components of Duke's plan include: (1) direct investment in renewable energy resources at existing or new Duke-owned facilities; (2) partnerships with third-party renewable resource suppliers through power purchase agreements; (3) purchases of unbundled RECs from both in-state and out-of-state suppliers; and (4) utilization of cost-effective energy efficiency savings. Duke believes that implementation of these strategies will yield a balanced and prudent portfolio of qualifying resources and a flexible mechanism for REPS compliance. Further, Duke stated that it is confident that it will meet its solar set-aside requirement under its 2011 REPS obligation by pursuing a number of strategies, including: (1) Duke-owned solar photovoltaic distributed generation program; (2) power purchase agreements for solar generation; and (3) purchase of in-state and out-of-state unbundled solar RECs, including RECs from solar thermal facilities. With regard to the swine and poultry waste set-aside requirement, Duke's primary strategy is to jointly procure swine waste-to-energy resources with PEC and other electric power suppliers. Duke has entered into four long-term REC purchase agreements with developers of swine waste-to-energy facilities in North Carolina. However, the production dates and projected production estimates for the facilities have materially changed and Duke now believes that compliance with the 2012 swine waste set-aside requirement is unlikely.

On March 10, 2011, in Docket No. E-7, Sub 984, Duke filed its 2010 REPS compliance report and an application for approval of an REPS rider. On August 23, 2011, the Commission issued an Order approving an REPS charge of \$0.49 per month for residential customers, \$2.44 per month for commercial customers, and \$26.97 per month for industrial customers, each of which is below the incremental cost cap established in G.S. 62-133.8(h). In addition, the Commission approved Duke's 2010 REPS compliance report, including a finding

that Duke acquired sufficient solar RECs to meet the 2010 requirement of 0.02% of its 2009 retail sales.

### Dominion North Carolina Power

In its 2011 REPS compliance plan, Dominion stated that it intends to meet its REPS requirement through the use of new renewable energy, energy efficiency, and unbundled RECs. Dominion plans to use unbundled solar RECs to meet its 2011 and beyond solar requirements and has entered into contracts to purchase sufficient RECs through 2013. As determined in the Commission's September 22, 2009 Order, Dominion is exempt from the 25% limit on the use of out-of-state RECs for REPS compliance found in G.S. 62-133.8(b)(2)(e). Dominion stated that it has purchased solar RECs for REPS compliance from out-of-state to minimize compliance costs. In addition, Dominion has entered into long term contracts with five companies for the purchase of swine waste-to-energy RECs. Dominion further noted that on February 22, 2011, the Commission issued Orders approving four Dominion energy efficiency programs.

On July 9, 2010, Dominion filed its 2009 REPS compliance report. On June 22, 2011, the Commission issued an Order requesting that the Public Staff file comments on Dominion's 2009 compliance report by September 1, 2011. In particular, the Commission requested the Public Staff to assess whether Dominion is likely to meet its future REPS obligations without exceeding the cost caps established under G.S. 62-133.8(h). On August 30, 2011, the Public Staff filed comments concluding that Dominion will be able to meet its REPS obligation for the foreseeable future without exceeding the cost caps and that Dominion's 2009 REPS compliance report should be approved by the Commission.

On August 25, 2011, Dominion filed its 2010 REPS compliance report. Dominion stated that it met its 2010 REPS solar set-aside obligation by purchasing unbundled out-of-state solar RECs. Dominion again elected not to file an application for an REPS rider in 2011.

### *EMCs and municipally-owned electric utilities*

There are thirty-one (31) electric membership corporations (EMCs) serving customers in North Carolina, including twenty-six (26) that are headquartered in the state. Twenty-five of the EMCs are members of North Carolina Electric Membership Corporation (NCEMC), a generation and transmission (G&T) services cooperative that provides wholesale power and other services to its members. In addition, there are seventy-four (74) municipal and university-owned electric distribution systems serving customers in North Carolina. Fifty-one of the North Carolina municipalities are participants in either North Carolina Eastern Municipal Power Agency (NCEMPA), or North Carolina Municipal Power Agency Number 1 (NCMPA1), municipal power agencies that

provide wholesale power to their members. The remaining municipally-owned electric utilities purchase their electric power from wholesale electric suppliers.

By Orders issued August 27, 2008, the Commission allowed twenty-three (23) EMCs to file their REPS compliance plans on an aggregated basis through GreenCo Solutions, Inc. (GreenCo),<sup>1</sup> and the fifty-one (51) municipal members of the power agencies to file through NCEMPA and NCMPA1.

### GreenCo

On May 3, 2011, the Commission issued an Order approving GreenCo's 2008 REPs compliance report, with a brief discussion noting that the energy efficiency RECs reported therein are subject to measurement and verification (M&V) based on the submission of further M&V data and the resolution of M&V issues pending in Docket No. E-100, Sub 113 with regard to reduced energy consumption.

On September 1, 2010, GreenCo filed its 2009 REPS compliance report stating that it had secured adequate resources to meet its members' solar set-aside obligation for 2010. On January 24, 2011, the Commission held a public hearing on the 2010 Integrated Resource Plans (IRP) and REPS compliance reports filed by the public utilities and cooperatives. On August 30, 2011, the Public Staff filed comments on GreenCo's 2009 REPS compliance report stating that it found no violations of the REPS statute or Commission's rules in the report or the compliance efforts of GreenCo and recommending that the Commission approve the GreenCo report.

On September 19, 2011, in Docket No. E-100, Sub 128, GreenCo filed its 2011 REPS compliance plan and 2010 REPS compliance report with the Commission on behalf of its member EMCs, as well as Mecklenburg Electric Cooperative and Broad River Electric Cooperative. GreenCo stated that it intends to use its members' allocations from SEPA, RECs purchased from both in-State and out-of-state renewable energy facilities, and energy efficiency savings from eleven recently approved energy efficiency programs to meet its members' REPS obligations. In addition, GreenCo is continuing to work with the collaborative of other electric power suppliers to meet the swine and poultry set-aside requirements. In its 2010 REPS compliance report, GreenCo stated that it secured adequate resources to meet the solar set-aside obligation for 2010, as well as the 2012 and 2013 solar requirement. Lastly, for 2010, the REPS incremental costs incurred by GreenCo's members were significantly less than the costs allowed under the per-account cost cap in G.S. 62-133.8(h).

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<sup>1</sup> Effective May 1, 2010, Blue Ridge Electric Membership Corporation is no longer a member of GreenCo.

### EnergyUnited Electric Membership Corporation

On August 27, 2010, in response to an Order by the Commission, EnergyUnited Electric Membership Corporation (EnergyUnited) filed revised 2008 and 2009 REPS compliance reports together with its 2010 IRP. On August 30, 2011, the Public Staff filed comments on EnergyUnited's 2008 and 2009 REPS compliance reports stating that it found no violations of the REPS statute or Commission's rules in the reports or the compliance efforts of EnergyUnited and recommending that the Commission approve EnergyUnited's reports.

On August 30, 2011, EnergyUnited filed its 2011 IRP and REPS compliance plan and 2010 REPS compliance report. In its report, EnergyUnited stated that it met its 2010 solar set-aside requirement by purchasing solar RECs. In its 2011 compliance plan, EnergyUnited stated that it has purchased enough solar RECs to meet its 2011 obligation. Over the next two years, EnergyUnited plans to begin evaluating options to fulfill the remainder of its solar needs. In addition, EnergyUnited plans to use landfill gas generation along with RECs from SEPA and others to begin to meet its general REPS obligation in 2012 and beyond.

### Tennessee Valley Authority

On November 12, 2010, Tennessee Valley Authority (TVA) filed an aggregated 2010 REPS compliance plan and 2009 REPS compliance report on behalf of its four wholesale customers serving retail customers in North Carolina: Blue Ridge Mountain Electric Membership Corporation, Mountain Electric Coop, Inc., Tri-State Electric Membership Corporation, and Murphy Power Board. TVA stated that its 2010 solar set-aside requirement was 116 MWh and its plan for meeting the requirement was to purchase solar RECs. For 2011, the solar set-aside requirement is projected to be 117 MWh and TVA's plan for meeting the requirement is to generate the energy at its facilities and/or purchase solar RECs. For the general 2012 REPS goal of 3%, TVA projected its cooperatives' requirement to be 18,000 MWh. In addition to the swine and solar set-aside portion, this requirement will be met by a combination of wind RECs, hydro generation, demand-side management and energy efficiency.

On August 30, 2011, the Public Staff filed comments on TVA's 2009 REPS compliance report. The Public Staff stated that TVA did not obtain any RECs for the four cooperatives to whom TVA sells electricity and did not impose any incremental costs on the cooperatives. The Public Staff recommended that the Commission approve TVA's report.

On August 31, 2011, TVA filed its 2011 REPS compliance plan and 2010 compliance report. TVA reiterated that it plans to meet its cooperatives' solar set-aside obligation by generating solar energy at its facilities and facilities owned by

others, and/or purchasing solar RECs. For the general 2012 REPS goal of 3%, TVA will meet this requirement by a combination of wind RECs, hydro generation, demand-side management and energy efficiency. TVA met its cooperatives' 2010 solar set-aside requirement by purchasing solar RECs.

#### Halifax Electric Membership Corporation

On October 15, 2010, Halifax Electric Membership Corporation (Halifax) filed its 2010 REPS compliance plan and 2009 REPS compliance report. Halifax's 2010 REPS compliance plan stated that its 2010 solar set-aside requirement was 38,740 kWh and its plan for meeting the requirement was to purchase solar RECs. For 2011, Halifax's solar set-aside requirement is projected to be 39,097 kWh, and Halifax's plan for meeting the requirement is to generate the energy at its 98.56 kW solar PV facility to be completed in the later part of 2010 and/or purchase solar RECs. For the general 2012 REPS goal of 3%, Halifax projected its requirement to be 5.9 MWh. In addition to the swine and solar set-aside portion, this requirement will be met by a combination of SEPA energy entitlements, wind RECs, and energy efficiency.

On May 3, 2011, the Commission issued an Order concluding that Halifax's 2008 REPS compliance report did not comply with the requirements of G.S. 62-133.8 and Commission Rule R8-67, mainly because Halifax had allocated the costs of demand-side management (DSM) and energy efficiency (EE) programs that pre-dated Senate Bill 3 as incremental REPS compliance costs. The Commission held, among other things, that energy savings from existing EE programs can be counted toward the REPS requirement, but the costs of existing programs are not incremental costs under G.S. 62-133.8(h). The Commission ordered Halifax to file revised 2008 and 2009 REPS compliance reports consistent with the Commission's Order by September 1, 2011. On August 29, 2011, Halifax filed updates to its 2008 and 2009 REPS compliance reports. Halifax's revised reports included, among other information, adjustments to the cost of some energy efficiency programs and REC balances.

On September 1, 2011, Halifax filed its 2011 REPS compliance plan and 2010 REPS compliance report. Halifax stated that it intends to meet its REPS requirement with a combination of SEPA energy entitlements, EE programs, solar energy production, solar and wind RECs and additional resources to be determined on an ongoing basis. Further, Halifax noted that it is a participant in the collaborative effort of electric power suppliers to meet the swine and poultry waste set-aside requirements. With regard to its 2010 solar set-aside obligation, Halifax met that requirement by generating solar energy on its 98.56 kW solar PV system and purchasing solar RECs.

### North Carolina Eastern Municipal Power Agency

On May 3, 2011, the Commission issued an Order concluding that NCEMPA's 2008 REPS compliance report did not comply with the requirements of G.S. 62-133.8 and Commission Rule R8-67 for several reasons, including: (1) NCEMPA allocated the costs of DSM and EE programs that pre-dated Senate Bill 3 as incremental REPS compliance costs; (2) NCEMPA included net lost revenues as a cost of REPS compliance; and (3) NCEMPA relied on its wholesale power provider's REPS compliance to satisfy a portion of NCEMPA's REPS obligation. The Commission ordered NCEMPA to file revised 2008 and 2009 REPS compliance reports consistent with the Commission's Order by September 1, 2011.

On August 31, 2011, the Commission received the 2011 REPS compliance plan and 2010 REPS compliance report filed by NCEMPA on behalf of its members, along with revised 2008 and 2009 REPS compliance reports. In its 2011 REPS compliance plan, NCEMPA stated that its members will meet their REPS requirements by purchasing RECs, as well as utilizing SEPA allocations and EE and DSM savings. NCEMPA identified a number of demand-side management and energy efficiency programs that its members may implement to produce energy savings for REPS compliance. NCEMPA stated that it has entered into contracts to purchase various types of RECs and will continue to investigate the market for unbundled RECs as a cost-effective means of REPS compliance. NCEMPA reiterated that it is prohibited from purchasing power to meet the REPS set-aside requirement, including its solar set-aside requirement. However, it met its 2010 solar set-aside requirement by purchasing solar RECs. In addition, NCEMPA has executed contracts to purchase sufficient solar RECs to meet its requirements through 2013. In addition, NCEMPA is participating jointly with other electric power suppliers to meet the aggregate swine and poultry waste set-aside requirements beginning in 2012. Finally, NCEMPA estimates that its incremental costs for REPS compliance will be less than its per-account cost cap in 2011 through 2013.

### North Carolina Municipal Power Agency No. 1

On May 3, 2011, the Commission issued an Order concluding that NCMPA1's 2008 REPS compliance report did not comply with the requirements of G.S. 62-133.8 and Commission Rule R8-67, mainly because NCMPA1 did not allocate the costs of acquiring RECs in 2008 to NCMPA1's 2008 REPS costs. Rather, NCMPA1 asserted that it had no REPS obligation in 2008 and, therefore, should defer its allocation of the RECs costs until the RECs are retired for compliance with G.S. 62-133.8. The Commission disagreed, holding that NCMPA1's obligation to meet the general 3% REPS target beginning in 2012 necessitated that NCMPA1 plan for compliance with its REPS obligation by purchasing and banking REPS in 2008 through 2011, and the cost of those 2008 RECs should be allocated in 2008. The Commission ordered NCMPA1 to file

revised 2008 and 2009 REPS compliance reports consistent with the Commission's Order by September 1, 2011.

On August 31, 2011, the Commission received the 2011 REPS compliance plan and 2010 REPS compliance report filed by NCMPA1 on behalf of its members, along with revised 2008 and 2009 REPS compliance reports. In its 2011 compliance plan, NCMPA1 stated that, in addition to the implementation of demand-side management and energy efficiency programs by its members, NCMPA1 intends to investigate and develop new renewable energy facilities; review proposals for renewable resources, including biomass, hydro, solar and wind; and negotiate and execute agreements for cost-effective resources. NCMPA1 intends to continue to investigate local, regional, and national markets for cost-effective RECs and may consider issuing an RFP for RECs. NCMPA1 and its members do not anticipate entering into any wholesale power purchase agreements that would meet the requirements of G.S. 62-133.8(c)(2)(e). NCMPA1 met its 2010 REPS solar set-aside requirement by a combination of purchases of energy from solar facilities and purchases of solar RECs. In addition, it has contracts for the acquisition of sufficient solar RECs to meet its requirements through 2012 and issued an RFP for additional solar resources in July 2011. Further, NCMPA1 intends to identify development opportunities for additional solar facilities to be located within its members' service areas or at municipal customer locations and investigate various other regional supply-side options. NCMPA1 is participating jointly with other electric power suppliers to meet the swine and poultry waste set-aside requirement beginning in 2012. NCMPA1 has entered into agreements for the purchase of both in-state and out-of-state unbundled swine RECs sufficient to meet its REPS obligation in 2013 through 2017. However, because of delays in development of the swine waste-to-energy facilities the 2012 goal will not be met. NCMPA1 has entered into agreements to purchase combination biomass and poultry waste in-state RECs and poultry out-of-state RECs sufficient to meet the 2012 poultry set-aside requirement. NCMPA1 is pursuing the procurement of other poultry RECs to meet its 2013 requirement. Finally, NCMPA1 estimates that its incremental costs for REPS compliance will be less than its per-account cost cap in 2011 through 2013.

#### Fayetteville Public Works Commission, Winterville and Oak City

On October 15, 2010, Fayetteville Public Works Commission (FPWC) filed its 2009 REPS compliance report. The report stated that FPWC has engaged in several activities that resulted in FPWC's receipt of RECs to be carried forward for use in complying with FPWC's REPS obligations in 2010 and beyond. Examples discussed in the report include the distribution of free compact fluorescent light bulbs (CFLs) to FPWC's customers in 2008 and 2009, the SmartWorks pilot program that has yielded reductions in energy use by 100 customers, and FPWC's 2009 Southeastern Power Administration (SEPA) allocation. In addition, FPWC noted that it completed work on its LEED-certified

customer service center in late November 2009, and anticipates that the energy savings at this facility will be significant in 2010 and later years.

On October 13, 2010, the towns of Winterville and Oak City filed their 2009 REPS compliance reports. Winterville stated that in 2009 it earned a total of 33 RECs by operation of the town's CFL and energy savings kit programs. These RECs will be carried forward for use in meeting Winterville's future REPS obligations.

Oak City's report stated that the town did not purchase or produce any RECs in 2009. In a corresponding 2010 REPS compliance plan filed on October 13, 2010, Oak City stated that it is studying various REPS compliance strategies and expects that the town's primary strategy will involve energy efficiency programs.

On August 30, 2011, the Public Staff filed comments on the 2009 REPS compliance reports of Winterville, Oak City and FPWC. The Public Staff recommended that the Commission approve the Winterville and Oak City reports as filed. With regard to FPWC's report, the Public Staff noted FPWC's request to rely on REPS compliance by its wholesale power supplier, Progress Energy Carolinas, and FPWC's inclusion of lost retail sales in its REPS costs were inconsistent with Commission decisions, noting that after FPWC filed its 2009 report the Commission decided in Docket E-48, Sub 6 that as a general rule neither a cooperative or municipal electric supplier can rely on its wholesale provider's REPS compliance, and that it is not acceptable for a cooperative or municipal supplier to include lost retail revenues as a cost of REPS compliance. After noting two additional exceptions, the Public Staff recommended that the Commission approve FPWC's 2009 compliance report.

On August 31, 2011, Winterville filed its 2011 REPS compliance plan and 2010 REPS compliance report. Winterville stated that it continues to implement existing energy efficiency programs and investigate the potential for implementing new programs. In addition, the town plans to purchase solar RECs to meet its 2011 through 2013 solar set-aside requirement. Winterville's 2010 REPS compliance report stated that it met its 2010 solar set-aside obligation by purchasing solar RECs.

On September 1, FPWC and Winterville filed their 2011 REPS compliance plans and 2010 REPS compliance reports. FPWC's 2011 compliance plan stated it has continued several efforts resulting in FPWC's receipt of RECs to be carried forward for use in complying with FPWC's REPS obligations in 2011 and beyond. Examples include the \$martWorks pilot program that has yielded reductions in energy use by customers, and FPWC's SEPA allocations. In addition, FPWC noted the energy savings produced by its LEED-certified customer service center, as well as plans to implement building modification programs expected to yield energy efficiency RECs in 2011 and later years. FPWC is participating

jointly with other electric power suppliers to meet the aggregate swine and poultry waste set-aside requirements beginning in 2012. In addition, FPWC plans to purchase sufficient solar RECs to meet its requirements through 2012. For 2013, FPWC intends to facilitate the development of a solar facility that will provide a portion of its RECs and purchase the remaining portion on the open market. In its 2010 REPS compliance report, FPWC stated that it met its 2010 solar set-aside requirement by purchasing solar RECs.

In its 2011 REPS compliance plan, Winterville stated that it continues to implement existing energy efficiency programs and investigate the potential for implementing new programs. Winterville stated that it has earned RECs by operation of the town's energy savings programs and these will be carried forward for use in meeting Winterville's future REPS obligations. In addition, the town plans to purchase solar RECs to meet its 2011 through 2013 solar set-aside requirement. Winterville's compliance report stated that it met its 2010 solar set-aside obligation by purchasing solar RECs.

On September 2, 2011, Oak City filed its 2011 REPS compliance plan and 2010 REPS compliance report. Oak City's compliance plan stated that it will continue to consider energy efficiency options, but will need to purchase RECs to meet its requirements during the next few years. Oak City's compliance report stated that it acquired one REC to meet the 2010 solar set-aside requirement.

#### Town of Fountain

The Town of Fountain did not file a REPS compliance report for 2008 or 2009 or a REPS compliance plan in 2008, 2009 or 2010. On June 22, 2011, the Commission issued an Order requiring Fountain to file its 2008, 2009 and 2010 REPS compliance reports, as well as its 2010 and 2011 REPS compliance plans by September 1, 2011. On September 20, 2011, the Commission received a letter from Fountain's attorney stating that the Town had assumed that REPS reports on its behalf were being filed by the Town's electric supplier, Pitt-Greene EMC. However, the Town recently learned that this was not the case. The letter stated that the Town is working on the REPS reports and will submit them no later than December 31, 2011.

#### Wholesale Providers Meeting REPS Requirements

PEC, as the wholesale provider, has agreed to meet the REPS requirements for the towns of Black Creek, Lucama, Stantonsburg, and Waynesville. Similarly, Duke has agreed to meet the REPS requirements for Blue Ridge EMC, Rutherford EMC, the towns of Dallas and Forest City, and the cities of Concord, Highlands and Kings Mountain, and Dominion has agreed to meet the REPS requirements for the Town of Windsor. The towns of Macclesfield, Pinetops, and Walstonburg have previously filed letters stating that the City of Wilson, as their wholesale provider, has agreed to include their loads with its own

for reporting to NCEMPA for REPS compliance. Halifax has agreed to meet the REPS requirement for the Town of Enfield.

## **Recommendation**

The Commission recommends that G.S. 62-300 be amended to add a \$25.00 filing fee for applications for registration of renewable energy facilities. The Commission has received more than 1,300 reports of proposed construction and registration applications since the implementation of Senate Bill 3. A reasonable fee for registration applications will help defray the cost of processing the applications and issuing orders of registration.

## **Conclusions**

All of the electric power suppliers except for the Town of Fountain appear to have met the 2010 solar set-aside requirement of Senate Bill 3. However, as stated in the 2010 Report and as highlighted again in this report, numerous issues continue to arise in the implementation of Senate Bill 3 that have required interpretation by the Commission of the statutory language: e.g., the definition of biomass, the electric power suppliers' obligations under the set-aside provisions, the eligibility of renewable energy facilities and resources to meet the set-aside provisions, etc. If the plain language of the statute was ambiguous, the Commission attempted to discern the intent of the General Assembly in reaching its decision on the proper interpretation of the statute.

# BACKGROUND

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In August 2007, North Carolina enacted comprehensive energy legislation, Session Law 2007-397 (Senate Bill 3), which, among other things, established a Renewable Energy and Energy Efficiency Portfolio Standard (REPS), the first renewable energy portfolio standard in the Southeast. Under the REPS, all electric power suppliers in North Carolina must meet an increasing amount of their retail customers' energy needs by a combination of renewable energy resources (such as solar, wind, hydropower, geothermal and biomass) and reduced energy consumption. Beginning at 3% of retail electricity sales in 2012, the REPS requirement ultimately increases to 10% of retail sales beginning in 2018 for the State's electric membership corporations and municipally-owned electric providers and 12.5% of retail sales beginning in 2021 for the State's electric public utilities.

In G.S. 62-133.8(j), the General Assembly required the Commission to make the following annual report:

No later than October 1 of each year, the Commission shall submit a report on the activities taken by the Commission to implement, and by electric power suppliers to comply with, the requirements of this section to the Governor, the Environmental Review Commission, and the Joint Legislative Commission on Governmental Operations. The report shall include any public comments received regarding direct, secondary, and cumulative environmental impacts of the implementation of the requirements of this section. In developing the report, the Commission shall consult with the Department of Environment and Natural Resources.<sup>2</sup>

On October 1, 2008, the Commission made its first annual report pursuant to G.S. 62-133.8(j),<sup>3</sup> and last year, on October 1, 2010, the Commission made its third annual report.<sup>4</sup> The remaining sections of this report detail, as required by the General Assembly, developments related to Senate Bill 3, activities undertaken by the Commission during the past year to implement Senate Bill 3, and actions by the electric power suppliers to comply with G.S. 62-133.8, the REPS provisions of Senate Bill 3.

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<sup>2</sup> G.S. 62-133.8(j) was amended by Session Law 2011-291 to require that the annual REPS Report be submitted to the Joint Legislative Commission on Governmental Operations, rather than the Joint Legislative Utility Review Committee.

<sup>3</sup> Annual Report of the North Carolina Utilities Commission to the Governor of North Carolina, the Environmental Review Commission and the Joint Legislative Utility Review Committee Regarding Energy and Energy Efficiency Portfolio Standard, October 1, 2008 (2008 REPS Report).

<sup>4</sup> Annual Report of the North Carolina Utilities Commission to the Governor of North Carolina, the Environmental Review Commission and the Joint Legislative Utility Review Committee Regarding Energy and Energy Efficiency Portfolio Standard, October 1, 2010 (2010 REPS Report).

# 2011 LEGISLATION

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During the 2011 Session of the General Assembly, the legislature enacted two amendments to Senate Bill 3.

First, Session Law 2011-55 (Senate Bill 75) was ratified by the General Assembly on April 21, 2011, and signed by the Governor on April 28, 2011. It was effective on April 28, 2011. In Sec. 1, Senate Bill 75 amended G.S. 62-133.8(a) by adding a new subdivision (3a), which states:

“Electricity demand reduction” means a measurable reduction in the electricity demand of a retail electric customer that is voluntary, under the real-time control of both the electric power supplier and the retail electric customer, and measured in real time, using two-way communications devices that communicate on the basis of standards.

In Secs. 2 and 3, Senate Bill 75 amended G.S. 62-133.8(b)(2) and (c)(2), respectively, by adding new subdivisions (g) to state that electricity demand reduction is a means by which electric public utilities, electric membership corporations and municipalities can meet their REPS requirements.

Second, Session Law 2011-309 (Senate Bill 710) was ratified by the General Assembly on June 18, 2011, and signed by the Governor on June 27, 2011. It was effective on June 27, 2011. Section 1 of Senate Bill 710 made several findings regarding the need to allow the use of renewable energy certificates (RECs) derived from the thermal energy of a combined heat and power facility that uses poultry waste as a fuel to meet the REPS poultry waste set-aside requirement. Among the reasons cited in Sec. 1 are the difficulty that electric power suppliers have experienced in procuring electricity derived from poultry waste at a reasonable cost, the benefit of diversifying the State’s viable options for generating electricity from renewable energy resources, and the benefits derived by improving the State’s air quality. Section 2 of Senate Bill 710 amended G.S. 62-133.8(f) by adding the phrase “or an equivalent amount of energy,” as follows (in pertinent part):

For calendar year 2014 and for each calendar year thereafter, at least 900,000 megawatt hours of the total electric power sold to retail electric customers in the State or an equivalent amount of energy shall be supplied, or contracted for supply in each year, by poultry waste combined with wood shavings, straw, rice hulls, or other bedding material.

This amendment to G.S. 62-133.8(f) was in response to the Commission’s decision in Docket No. E-100, Sub 113, as more fully discussed below, that thermal RECs could not be used to meet the poultry set-aside requirement.

# COMMISSION IMPLEMENTATION

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## Rulemaking Proceeding

As detailed in the Commission's 2008 REPS Report, after Senate Bill 3 was signed into law the Commission initiated a proceeding in Docket No. E-100, Sub 113 to adopt rules to implement the REPS and other provisions of the new law. On February 29, 2008, the Commission issued an Order adopting final rules implementing Senate Bill 3. The rules, in part, require each electric power supplier to file an annual REPS compliance plan and an annual REPS compliance report to demonstrate, respectively, reasonable plans for and actual compliance with the REPS requirement.

In its 2010 REPS Report, the Commission noted that it had issued a number of orders interpreting various provisions of Senate Bill 3, in which it made the following conclusions:

- Tennessee Valley Authority's (TVA) distributors making retail sales in North Carolina and electric membership corporations (EMCs) headquartered outside of North Carolina that serve retail electric customers within the State must comply with the REPS requirement of Senate Bill 3, but that the university-owned electric suppliers, Western Carolina University and New River Light & Power Company, are not subject to the REPS requirement.
- Each electric power supplier's REPS obligation, both the set-aside requirements and the overall REPS requirements, should be based on its prior year's actual North Carolina retail sales.
- An electric public utility cannot use existing utility-owned hydroelectric generation for REPS compliance, but may use power generated from new small (10 MW or less) increments of utility-owned hydroelectric generating capacity.
- The solar, swine waste, and poultry waste set-aside requirements should have priority over the general REPS requirement where both cannot be met without exceeding the per-account cost cap established in G.S. 62-133.8(h).
- The set-aside requirements may be met through the generation of power, purchase of power, or purchase of unbundled RECs.

- The 25% limitation on the use of out-of-state RECs applies to the general REPS obligation and each of the individual set-aside provisions.
- The electric power suppliers are charged with collectively meeting the aggregate swine and poultry waste set-aside requirements and may agree among themselves how to collectively satisfy those requirements.
- RECs associated with the electric power generated at a biomass-fueled combined heat and power facility located in South Carolina and purchased by an electric public utility in North Carolina would be considered as in-State pursuant to G.S. 62-133.8(b)(2)(d), but that RECs associated with out-of-state renewable generation not delivered to and purchased by an electric public utility in North Carolina and RECs associated with out-of-state thermal energy would not be considered to be “in-State” RECs pursuant to G.S. 62-133.8(b)(2)(d).
- Consistent with prior Commission decisions, only RECs associated with the percentage of electric generation that results from methane gas that was actually produced by poultry or swine waste may be credited toward meeting the poultry and swine waste set-aside requirements. Thus, not all of the methane gas produced by the anaerobic digestion of swine or poultry waste, as well as “other organic biodegradable material,” would qualify toward the set-aside requirements because the other material described as mixed with the poultry or swine waste is responsible for some percentage of the resulting methane gas.
- In response to a joint motion filed by Progress Energy Carolinas, Inc. (PEC), Duke Energy Carolinas, LLC (Duke), Dominion North Carolina Power (Dominion), North Carolina Electric Membership Corporation (NCEMC), North Carolina Eastern Municipal Power Agency (NCEMPA), and North Carolina Municipal Power Agency Number 1 (NCMPA1) (jointly, the Electric Suppliers), in Docket No. E-100, Sub 113, the Commission concluded that issuance of a joint request for proposals (RFP) by the Electric Suppliers is a reasonable means for the Electric Suppliers to work together collectively to meet the swine waste resource set-aside requirement.
- In response to a motion filed in Docket No. E-100, Sub 113 by PEC on behalf of Dominion, Duke, NCEMC, GreenCo Solutions, Inc., North Carolina Sustainable Energy Association, North Carolina Pork Council, Fibrowatt LLC, Green Energy Solutions NV, Inc., Attorney General and Public Staff, the Commission approved a Pro Rata Mechanism (PRM) as a reasonable and appropriate means for the State’s electric power

suppliers to meet the aggregate swine and poultry waste set-aside obligations of G.S. 62-133.8(e) and (f). The PRM provides that (1) the statewide aggregate swine and poultry waste set-aside requirements should be allocated among all of the electric power suppliers based upon the ratio of each electric power supplier's prior year's retail sales to the State's total retail sales; (2) an electric power supplier shall be deemed to be in compliance with the swine or poultry waste set-aside requirement once it has satisfied its allocated share of the statewide aggregate requirement or has reached its incremental cost cap pursuant to G.S. 62-133.8(h); (3) no electric power supplier shall be obligated to satisfy more than its allocated share of the statewide aggregate swine or poultry waste set-aside requirement; and (4) electric power suppliers may jointly procure renewable energy resources in order to satisfy their individual allocated shares of the statewide aggregate swine or poultry waste set-aside requirements. In response to arguments by NCEMPA and NCMPA1, the Commission reiterated its earlier holding that the set-aside requirements, as demonstrated by the specificity of their express inclusion in the legislation, have priority over other methods of compliance with the general REPS percentage obligation where the general REPS percentage obligation cannot be met because of the incremental cost cap.

- As it had earlier done with regard to the aggregate swine waste set-aside requirement, the Commission approved the joint procurement of RECS from energy produced by poultry waste, the sharing of poultry waste generation bids among electric suppliers, and other collaborative efforts proposed by PEC, Dominion, NCEMC, NCEMPA, NCMPA1, EnergyUnited Electric Membership Corporation, Halifax Electric Membership Corporation, GreenCo Solutions, Inc. and the Fayetteville Public Works Commission as a reasonable means for the State's electric suppliers to work together to meet the poultry waste set-aside requirement.
- The Commission found that the term "allocations made by the Southeastern Power Administration" (SEPA), is used as a term of art in G.S. 62-133.8(c)(2)(c). The Commission, therefore, concluded that a municipal electric power supplier or electric membership corporation (EMC) will be permitted to use the total annual amount of energy supplied by SEPA to that municipality or EMC to comply with its respective REPS requirement, subject to the thirty percent limitation provided in G.S. 62-133.8(c)(2)(c).

Since October 1, 2010, the Commission has issued a number of additional orders interpreting various provisions of Senate Bill 3 and seeking additional information to aid the Commission in future interpretations, as described below.

***Order Denying the Use of Thermal RECs to Satisfy Poultry Waste Set-Aside Requirement, Docket No. E-100, Sub 113 (October 8, 2010)***

On August 10, 2010, Peregrine Biomass Development Company, LLC (Peregrine), filed a Petition in Docket No. E-100, Sub 113 requesting that the Commission exercise its discretionary authority pursuant to G.S. 62-133.8(i)(2) (the off-ramp) to allow renewable energy certificates (RECs) associated with the thermal energy output of a combined heat and power (CHP) facility which uses poultry waste as a fuel to meet the poultry waste set-aside requirement under G.S. 62-133.8(f).

Previously, in Docket No. SP-578, Sub 0, Green Energy Solutions NV, Inc. (GES), the owner of another CHP facility that uses, in part, poultry waste as fuel, filed a Motion for Clarification seeking an interpretation by the Commission that the statute allows the use of both RECs associated with electric power and thermal energy to meet the poultry waste set-aside requirement. In response to the Commission's June 21, 2010 Order Requesting Comments, the Public Staff argued that thermal RECs may not be used to satisfy the poultry waste set-aside requirement: "under G.S. 62-133.8(f), RECs may satisfy the poultry waste set-aside only if they result from the actual generation of electric power from poultry waste." The Public Staff further noted that the Commission may be able to determine that it is in the public interest to modify the poultry waste set-aside requirement to include thermal RECs if requested to do so under the off-ramp provision. On July 21, 2010, GES withdrew its Motion.

By Order dated August 25, 2010, the Commission requested that the Public Staff and other interested parties file comments and reply comments on the relief requested by Peregrine in its Petition: whether the Commission should invoke the off-ramp provision to allow thermal RECs to be used to satisfy the poultry waste set-aside requirement. In addition, the Commission requested that the Public Staff and other interested parties address in their comments and reply comments the issue initially raised by GES in its Motion for Clarification: whether it is necessary to invoke the off-ramp to allow thermal RECs to be used to satisfy the poultry waste set-aside requirement. Comments and reply comments were filed in September, 2010.

On October 8, 2010, the Commission issued an Order denying Peregrine's request to allow RECs associated with the thermal heat output of a CHP facility that uses poultry waste as fuel to meet the poultry waste set-aside requirement. The Commission compared the language in G.S. 62-133.8(d), the solar set-aside statute, with the language in G.S. 62-133.8(f), the poultry waste set-aside statute. The Commission reasoned that the legislature's inclusion of the phrases "or an equivalent amount of energy" and "new metered solar thermal energy facilities" in subsection (d), coupled with the lack of similar express language in subsection (f), demonstrated a clear legislative intent to allow solar thermal RECs to meet the solar set-aside requirement, but not to allow thermal

RECs to meet the poultry waste set-aside requirement. In addition, the Commission concluded that good cause had not been shown to invoke the Commission's discretion to modify the poultry waste set-aside provision to delay the requirement, noting that the electric power suppliers had recently issued a joint RFP to acquire poultry waste derived energy and that it would be premature to invoke the REPS modification provision, given that compliance with the poultry waste set-aside provision is not required until 2012. Finally, the Commission suggested that Peregrine and parties supporting Peregrine's position could seek an amendment to G.S. 62-133.8(f) by the General Assembly.<sup>5</sup>

***Order on Cost Recovery of Swine and Poultry Waste Energy by an Electric Public Utility, Docket No. E-100, Sub 113 (November 23, 2010)***

On September 14, 2010, PEC, Duke, Dominion, NCEMC, NCEMPA, NCMPA1 and GreenCo Solutions, Inc. (collectively, Movants), filed a joint motion in Docket No. E-100, Sub 113 requesting a declaratory ruling that an electric public utility is entitled to recover through G.S. 62-133.2(a1)(6) the total delivered cost of all megawatt-hours purchased from renewable energy facilities and new renewable energy facilities using swine and poultry waste to generate electricity, regardless of whether the electric public utility purchases the renewable energy certificate (REC) associated with the purchased renewable energy.

On September 16, 2010, the Commission issued an Order requesting comments and reply comments. Comments were filed by the Movants and the Public Staff, as well as other parties.

On November 23, 2010, the Commission issued an Order holding that an electric public utility can recover through its fuel cost rider the total delivered cost of the purchase of energy generated by a swine or poultry waste-to-energy facility where the RECS associated with the production of the energy are purchased by another North Carolina electric power supplier to comply with the REPS statewide aggregate swine and poultry waste set-aside requirements. The Commission compared the provisions and interplay of G.S. 62-133.2, the fuel and fuel-related cost adjustment statute, with G.S. 62-133.8, the REPS statute. The Commission reasoned that neither of these statutes requires that the purchases of power and the associated RECs be bundled in order to recover the cost of the purchased electricity under G.S. 62-133.2(a1)(6) so long as the RECs were used by another electric power supplier to meet its set-aside requirement. Further, the Commission discussed its previous rulings approving mechanisms by the State's electric power suppliers to aggregate purchases of swine and poultry energy and RECs in order to meet the set-aside requirements for those

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<sup>5</sup> As noted above under 2011 Legislation, in Senate Bill 710 the General Assembly amended G.S. 62-133.8(f) by adding the phrase "or an equivalent amount of energy" to allow thermal energy from a CHP facility fueled by poultry waste to now be eligible to meet the poultry waste set-aside requirement.

technologies, and the fact that such mechanisms could result in an electric public utility purchasing the electricity but not the RECs associated with swine or poultry waste-to-energy. In that regard, the Commission opined that the General Assembly did not intend for the electric public utility to be denied recovery of the full delivered cost of the purchased electricity under the utility's fuel cost rider, or to be relegated to recovery of that cost by filing a general rate case.

***Order Amending Rules R8-64 Through R8-69 and Adopting Final NC-RETS Operating Procedures, Docket No. E-100, Subs 113 and 121 (January 31, 2011)***

On September 4, 2009, the Commission issued an Order in Docket No. E-100, Sub 113 allowing electric power suppliers and other interested parties an opportunity to propose specific amendments to the Commission's procedural rules, Rules R8-64 through R8-69, that would streamline the Commission's administration of G.S. 62-133.8 and 62-133.9. Numerous extensions of time were granted to the parties in an effort to reach consensus on the issues being discussed among the parties. Written comments were filed on March 1, 2010, and reply comments were filed on April 1, 2010.

On January 27, 2010, the Commission issued an Order in Docket No. E-100, Subs 113 and 121 requesting comments on proposed amendments to Rule R8-67 regarding the participation of electric power suppliers and renewable energy facilities in the North Carolina Renewable Energy Tracking System (NC-RETS). Written comments were filed by several parties on March 9, 2010.

On July 1, 2010, the Commission issued an Order in Docket No. E-100, Sub 121 adopting Interim Operating Procedures for the NC-RETS REC tracking system detailing the circumstances under which the NC-RETS Administrator is authorized to issue RECs. The Commission noted that proposed rule changes regarding implementation of Senate Bill 3 were pending and stated that it anticipated issuing an order regarding those rules and allowing parties to comment as to whether there are any conflicts or inconsistencies between the proposed revised rules and the Interim Operating Procedures for NC-RETS. The Commission further anticipated issuing final Operating Procedures for NC-RETS following receipt of comments on the proposed revised rules.

By Order dated August 3, 2010, the Commission proposed amendments to Rules R8-64 through R8-69 based, in part, on the comments received and invited comments on the proposed amendments and the NC-RETS Interim Operating Procedures. In addition, to encourage renewable energy facilities to register promptly with NC-RETS and to have RECs issued as soon as possible following the production of the energy associated with the RECs, the Commission established that, beginning January 1, 2011, renewable energy facilities that participate in NC-RETS are only eligible for historic REC issuances

for energy production going back two years. Comments were filed with the Commission by several parties in October and November 2010.

On January 31, 2011, the Commission issued an Order amending Rule R8-64 through R8-69, adopting final NC-RETS Operating Procedures and approving an application form for use by owners of renewable energy facilities in obtaining registration of a facility under Rule R8-66. The amendments to Rule R8-64 through R8-69 clarify and streamline the application procedures, registration, record keeping and other requirements for renewable energy facilities.

***Order Requesting Comments on Measurement and Verification of Reduced Energy Consumption, Docket No. E-100, Sub 113 (August 24, 2010)***

On August 24, 2010, the Commission issued an Order in Docket No. E-100, Sub 113 expressing concerns that the Commission's current rules might prove inadequate to ensure the credibility of the reduced energy consumption amounts reported and used for REPS compliance, especially in regard to energy efficiency (EE) and/or demand-side management (DSM) activities of electric membership corporations and municipal power suppliers. The Commission requested comments on the following issues: (1) what kind of measurement and verification (M&V) documentation should be filed and/or made available for audit by each type electric power supplier that uses EE/DSM program achievements toward its general REPS compliance obligation; (2) whether and in what proceeding, if any, the Commission should review such M&V documentation in order to establish the savings from EE/DSM programs that may then be used by each electric power supplier to comply with REPS; (3) the appropriate method for determining the energy savings achieved by a DSM measure or program by an electric membership corporation or municipal power supplier; and (4) whether electric membership corporations should be required to include an M&V reporting plan in their EE/DSM program applications similar to the plans required of electric public utilities. Numerous parties filed comments and reply comments in October and November 2010.

***Order Convening Working Group on Unmetered Solar Thermal RECs, Docket No. E-100, Sub 113 (August 25, 2010)***

Pursuant to G.S. 62-133.8(a)(7), a renewable energy facility includes a solar thermal facility. As such, a solar thermal facility is eligible to earn RECs that may be sold to an electric power supplier for REPS compliance. However, pursuant to G.S. 62-133.8(a)(6), a REC is equal to one megawatt-hour of electricity or equivalent energy "supplied by" a renewable energy facility or new renewable energy facility. Therefore, the proper metric for determining the number of RECs earned by a solar thermal facility is the amount of thermal

energy actually used in heating water (or other solar thermal process) and not simply the system's capacity for doing so.

On August 25, 2010, the Commission issued an Order in Docket No. E-100, Sub 113 noting that solar industry developers were proposing to use a computer software model to calculate the number of thermal RECs generated by an unmetered solar thermal facility. The Commission expressed concern, however, that the software model may only estimate the capacity of the solar thermal facility to generate thermal energy and potentially overestimate the amount of thermal energy generated by the facility that was actually used in a solar thermal application. The Commission, therefore, requested that the Public Staff convene a working group of technical experts and other interested stakeholders to make recommendations to the Commission within three months regarding the appropriate assumptions and methodology for reasonably estimating the useful thermal energy produced by an unmetered solar thermal facility and the number of RECs earned by that facility. The Public Staff has facilitated several meetings of the working group and filed two reports on the working group's recommendations.

## **Renewable Energy Facilities**

Senate Bill 3 defines certain electric generating facilities as renewable energy facilities or new renewable energy facilities. RECs associated with electric or thermal power generated at such facilities may be used by electric power suppliers for compliance with the REPS requirement as provided in G.S. 62-133.8(b) and (c). In its rulemaking proceeding, the Commission adopted rules providing for a report of proposed construction, certification or registration of renewable energy facilities and new renewable energy facilities.

Pursuant to G.S. 62-110.1(a), no person, including any electric power supplier, may begin construction of an electric generating facility in North Carolina without first obtaining from the Commission a certificate of public convenience and necessity (CPCN). Two exemptions from this certification requirement are provided in G.S. 62-110.1(g): (1) self-generation, and (2) nonutility-owned renewable generation under 2 megawatts (MW). Any person exempt from the certification requirement must, nevertheless, file a report of proposed construction with the Commission pursuant to Rule R8-65.

To ensure that each renewable energy facility from which electric power or RECs are used for REPS compliance meets the particular requirements of Senate Bill 3, the Commission adopted Rule R8-66 to require that the owner, including an electric power supplier, of each renewable energy facility or new renewable energy facility register with the Commission if it intends for RECs it earns to be eligible for use by an electric power supplier for REPS compliance. This registration requirement applies to both in-State and out-of-state facilities.

As of July 27, 2011, the Commission has accepted registration statements filed by 337 facilities.

As detailed in the 2010 REPS Report, the Commission has issued a number of orders addressing issues related to the registration of a facility, including the definition of “renewable energy resource,” as summarized below.

- Accepted registration as a new renewable energy facility a 1.628 MW electric generating facility to be located near Clinton in Sampson County, North Carolina, and fueled by methane gas produced from anaerobic digestion of organic wastes from a Sampson County pork packaging facility and from a local swine farm.
- Issued a declaratory ruling that (1) the percentage of refuse-derived fuel (RDF) that is determined by testing to be biomass, and the synthesis gas (Syngas) produced from that RDF is a “renewable energy resource” as defined in G.S. 62-133.8(a)(8); (2) the applicant’s delivery of Syngas from a co-located gasifier to an electric utility boiler would not make the company a “public utility” as defined in G.S. 62-3(23); and (3) the applicant’s construction of a co-located gasifier and the piping connection from the gasifier to an existing electric utility boiler would not require a certificate of public convenience and necessity under G.S. 62-110(a) or under G.S. 62-110.1(a).
- Accepted registration as a new renewable energy facility a biomass-fueled 2.4 kW electric generating facility to be located at the applicant’s home in Wake County, North Carolina, and fueled by ethanol derived from 100% renewable organic materials.
- Issued an Order amending existing certificates of public convenience and necessity for two electric generating facilities in Southport and Roxboro, North Carolina, that were being converted to burn a fuel mix of coal, wood waste, and tire-derived fuel (TDF). The Commission concluded that the portion of TDF derived from natural rubber, an organic material, meets the definition of biomass, and is eligible to earn RECs, but required the applicant to submit additional information to demonstrate the percentage of TDF that is derived from natural rubber. In addition, the Commission accepted registration of the two facilities as new renewable energy facilities.
- Accepted registration as a new renewable energy facility a 1.628 MW combined heat and power (CHP) facility to be located in Darlington County, South Carolina, that will generate electricity using methane gas produced via anaerobic digestion of poultry litter from a chicken farm mixed with other organic, biodegradable materials, and use the waste heat from the electric generators to provide temperature control for the

methane-producing anaerobic digester as well as the chicken houses. The Commission concluded that the thermal energy that is used as an input back into the anaerobic digestion process effectively increases the efficiency of the electric production from the facility; is not used to directly produce electricity or useful, measureable thermal or mechanical energy at a retail electric customer's facility pursuant to G.S. 62-133.8(a)(1); and is not eligible for RECs. However, the thermal energy that is used to heat the chicken houses is eligible to earn RECs. In a prior order, the Commission had clarified that only that portion of the energy generated from the biogas that is derived from poultry waste is eligible to earn RECs that may be used to meet the REPS poultry waste set-aside requirement.

- Issued a declaratory ruling that (1) biosolids, the organic material remaining after treatment of domestic sewage and combusted at the applicant's wastewater treatment plant, are a "renewable energy resource" as defined by G.S. 62-133.8(a)(8); and (2) the applicant, a county water and sewer authority organized in 1992 pursuant to the North Carolina Water and Sewer Authorities Act, is specifically exempt from regulation as a public utility pursuant to G.S. 62-3(23)(d).
- Accepted for registration as a new renewable energy facility a solar thermal hot water heating facility located in Mecklenburg County, North Carolina, used to heat two commercial swimming pools. The Commission concluded, however, that as an unmetered solar thermal facility, RECs earned based on the capacity of the solar panels are not eligible to meet the solar set-aside requirement of G.S. 62-133.8(d). However, the Commission allowed the applicant to earn general thermal RECs based upon an engineering analysis of the energy from the unmetered solar thermal system actually required to heat the pools, which was determined to be substantially less than the capacity of the solar thermal panels.

Since October 1, 2010, the Commission has issued a number of additional orders interpreting provisions of Senate Bill 3 regarding applications for registration of renewable energy facilities, as described below.

***Order Accepting Registration of New Renewable Energy Facilities Fueled by Co-Firing Biomass, Including Primary Harvest Whole Trees, Docket No. E-7, Subs 939 and 940 (October 11, 2010)***

On March 1, 2010, Duke Energy Carolinas, LLC (Duke), filed applications in Docket Nos. E-7, Sub 939 and Sub 940 to register Buck Steam Station, Units 5 and 6, and Lee Steam Station, Units 1, 2 and 3, respectively, as new renewable energy facilities pursuant to G.S. 62-133.8 and Commission Rule R8-66. In its registration applications, Duke stated that biomass co-firing test burns were conducted at each

facility using sawdust and/or whole tree wood chips. Several environmental groups intervened and requested that the Commission deny or stay Duke's registrations, arguing that the whole tree wood biomass Duke sought to register is not wood waste and is not a renewable energy resource under Senate Bill 3.

By Order dated April 27, 2010, the Commission consolidated these two dockets and scheduled an evidentiary hearing and oral argument to consider the contested factual and legal issues. The evidentiary hearing and oral arguments convened, as scheduled, on July 14, 2010. Proposed orders and briefs were filed on September 15, 2010.

On October 11, 2010, the Commission issued an Order accepting for registration as renewable energy facilities Duke's Buck and Lee Steam Stations, concluding that primary harvest wood products, including wood chips from whole trees, are "biomass resources" and "renewable energy resources" under G.S. 62-133.8(a)(8). The Commission reasoned that the General Assembly, by including several specific examples of biomass in the statute, did not intend to limit the scope of the term to those examples. Rather, the term "biomass" encompasses a broad category of resources and should not be limited absent express intent to do so. As further support for this interpretation, the Commission noted that the General Assembly expressly excluded peat, a form of biomass, from the definition of "renewable energy resource," and could have done likewise for whole trees if it had intended that they be excluded from the definition of "renewable energy resource." Finally, the Commission stated that it was satisfied from Duke's testimony that Duke will use primary harvest wood products in an economic and sustainable manner.

The Environmental Defense Fund and North Carolina Sustainable Energy Association appealed the Commission's Order to the North Carolina Court of Appeals. On August 2, 2011, the Court of Appeals issued a decision affirming the Commission's Order. The Court held that the Commission had properly applied the principles of statutory construction in holding that the General Assembly's inclusion of several examples of biomass in the statute was not intended to limit the scope of the terms "biomass" or "renewable energy resource" to those examples.

***Order Declaring Yard Waste, Municipal Solid Waste and the Percentage of Syngas Derived from Yard Waste and Municipal Solid Waste to be Renewable Energy Resources, Docket No. SP-100, Sub 28 (April 18, 2011)***

On March 15, 2011, ReVenture Park Investments I, LLC (ReVenture), filed a request for a declaratory ruling regarding a proposed 20-MW biomass-to-energy facility that it plans to develop on a 667-acre tract along the Catawba River that was an industrial site. ReVenture requested that the Commission declare, among other points, that (1) yard waste, including leaves, brush, grass

clippings and tree limbs, is a renewable energy resource; (2) municipal solid waste (MSW) that is not recycled, including certain types of paper, cardboard, packaging materials and small wood items, is a type of refuse-derived fuel (RDF) that is a renewable energy resource; (3) the percentage of synthesis gas (Syngas) produced from yard waste and RDF, but not including that portion produced with certain non-renewable materials, is a renewable energy resource; and (4) the RECS attributable to ReVenture's biomass generating facility will be entitled to triple credits because ReVenture's facility qualifies as a cleanfields renewable energy demonstration park under Section 4 of Session Law 2010-195 (Senate Bill 886).

On April 18, 2011, the Commission issued an Order declaring, among other things, that yard waste and the percentage of RDF used by ReVenture as fuel are renewable energy resources, and that the percentage of Syngas produced from yard waste and RDF used by ReVenture as fuel is a renewable energy resource. The Commission first noted that it previously rendered such a declaratory ruling with regard to RDF and Syngas in Docket No. SP-100, Sub 23, and could find no reason to reach a different conclusion in this docket. The Commission further opined that yard waste is an organic material having a constantly replenished supply, and is thus a renewable resource under G.S. 62-133.8(a)(8). In addition, the Commission concluded that if ReVenture's facility is certified as a cleanfields renewable energy demonstration park under Senate Bill 886, then ReVenture will be entitled to triple credit for the RECs associated with the renewable energy produced by the facility. Finally, the Commission made rulings on several details regarding the triple crediting and retirement of RECs by ReVenture with NC-RETS.

***Order Accepting Registration of a New Renewable Energy Facility Producing Electricity and Steam from Landfill Gas, Docket No. SP-100, Sub 9 (July 5, 2011)***

On January 7, 2011, Raleigh Steam Producers, LLC (RSP), and Wake Gas Producers, LLC (WGP) (collectively, Petitioners), filed a Petition for Supplemental Declaratory Rulings in Docket No. SP-100, Sub 9. Concurrently, in Docket No. SP-967, Sub 0, RSP filed a report of proposed construction and a registration statement for a new renewable energy facility to be located in northern Wake County. RSP currently operates two boilers providing steam to Covidien-Mallinckrodt (Mallinckrodt) at its industrial plant. The larger of the two boilers is fired primarily by landfill gas collected by WGP at the North Wake County Landfill. WGP sells the landfill gas to RSP.

RSP described the new facility as a 2.8-MW landfill gas-fueled new renewable combined heat and power (CHP) facility to be built in two stages. RSP stated that the first phase of construction, consisting of a 750-kW low pressure dual steam generator using steam from an existing boiler to produce electricity and process steam, is expected to become operational in late 2011. Subsequent

additions will include a new boiler and 790-kW turbine generator and a 1.6 MW landfill gas-fueled engine/generator set with heat recovery equipment. Both boilers will be fired primarily by approximately 90% landfill gas and 10% natural gas.

Petitioners requested a declaratory ruling, among other things, that the facility will not be a “public utility” under G.S. 62-3(23(a)), will be eligible for registration as a new CHP facility and will earn RECs for all of the waste steam produced by the turbine generators that is returned to a boiler for use in generating additional electric power.

By Order dated July 5, 2011, the Commission accepted registration of the facility as a new renewable CHP facility and concluded that the proposed changes in the Petitioners’ operations will not cause either of them to become a public utility. With regard to the electricity, steam and thermal energy to be produced by the facility, the Commission concluded that the portion of electricity produced by landfill gas will be eligible to earn RECs, and the portion of waste steam produced from the electric turbines that is used as an input for Mallinckrodt’s manufacturing process will be eligible to earn thermal RECs. However, the Commission concluded that steam that bypasses the turbine generators and waste heat being used to pre-heat the feedwater for the boilers will not be used to directly produce electricity or useful, measureable thermal or mechanical energy at a retail electric customer’s facility pursuant to G.S. 62-133.8(a)(1), and, therefore, will not be eligible to earn RECs.

***Orders Accepting Registrations of New Renewable Energy Facilities Producing Solar Thermal Hot Water, Docket Nos. RET-4, Sub 5 and RET-8, Subs 12, 13 and 14 (August 15, 2011)***

On July 28, 2010, in Docket No. RET-4, Sub 5, FLS YK Farm, LLC (FLS), filed a registration statement for a new renewable energy facility being installed at the U.S. Marine Corps Camp Lejeune in Jacksonville, North Carolina, consisting of solar thermal hot water heaters on 108 residences. On February 11, 2011, in Docket No. RET-8, Subs 12, 13 and 14, FLS Owner II, LLC (FLS), filed registration statements for new renewable energy facilities being installed at Camp Lejeune, consisting of solar thermal hot water heaters on a total of 1,021 residences. FLS requested that it be allowed to install meters on a representative sample of the homes, rather than on each home, and assign to the unmetered homes the thermal heat measures recorded on the metered homes.

On August 15, 2011, the Commission issued Orders accepting registration of residential solar thermal water heating facilities on the 1,129 homes with a representative sample of the homes being metered to determine the number of Btus of thermal energy that will be produced and on which RECs will be earned by the 1,129 systems.

## **North Carolina Renewable Energy Tracking System (NC-RETS)**

In its February 29, 2008 Order in Docket No. E-100, Sub 113, the Commission concluded that REPS compliance would be determined by tracking RECs associated with renewable energy and energy efficiency. In its Order, the Commission further concluded that a “third-party REC tracking system would be beneficial in assisting the Commission and stakeholders in tracking the creation, retirement and ownership of RECs for compliance with Senate Bill 3” and stated that “[t]he Commission will begin immediately to identify an appropriate REC tracking system for North Carolina.” Pursuant to G.S. 133.8(k), enacted in 2009, the Commission was required to develop, implement, and maintain an online REC tracking system no later than July 1, 2010, in order to verify the compliance of electric power suppliers with the REPS requirements.

On September 4, 2008, the Commission issued an Order in Docket No. E-100, Sub 121 initiating a new proceeding to define the requirements for a third-party REC tracking system, or registry, and to select an administrator. The Commission established a stakeholder process to finalize a Requirements Document for the tracking system.

After issuing a request for proposals and evaluating the bids received, the Commission signed a Memorandum of Agreement (MOA) with APX, Inc. (APX), on February 2, 2010, to develop and administer the North Carolina Renewable Energy Tracking System, NC-RETS. Pursuant to the MOA, on July 1, 2010, APX successfully launched NC-RETS. By letter dated September 3, 2010, the Commission informed APX that, to the best of its knowledge, NC-RETS has performed in substantial conformance with the MOA and has no material defects. The Commission, therefore, authorized APX to begin billing North Carolina electric power suppliers and other users the fees that were established in the MOA.

Funding for NC-RETS is provided directly to APX by the electric power suppliers in North Carolina that are subject to the REPS requirements of Senate Bill 3 and recovered from the suppliers’ customers through the REPS incremental cost rider. Owners of renewable energy facilities and other NC-RETS users do not incur charges to open accounts, register projects, and create and transfer RECs, but will incur nominal fees to export RECs to other tracking systems or to retire RECs other than for REPS compliance.

At the end of 2010, each electric power supplier was required to place the solar RECs that it acquired to meet its 2010 REPS solar set-aside obligation into a 2010 compliance account where the RECs are available for audit. When the Commission concludes its review of each electric power suppliers’ 2010 REPS compliance report, the associated RECs will be permanently retired.

Since October 1, 2010, the Commission has issued several orders addressing issues pertaining to RECs credits, including the following:

- On December 10, 2010, in Docket No. E-100, Subs 113 and 121, the Commission issued an Order extending the deadline for the issuance of historic RECS from January 1, 2011 to June 1, 2011. As in previous orders, the Commission reiterated its purpose to encourage the issuance of RECs as soon as possible following the production of the energy associated with the RECs. The Commission further stated that the extension of the deadline for the issuance of historic RECS was intended to ensure that all renewable energy facilities have an adequate opportunity to obtain credit for eligible energy production that predated the Commission's registration system and NC-RETS.
- On March 25, 2011, in Docket No. EMP-17, Sub 1, the Commission issued an Order approving a request by EnergyUnited Electric Membership Corporation (EnergyUnited) to transfer into NC-RETS from the Electric Reliability Council of Texas, Inc. (ERCOT) REC tracking system 150,000 RECS. The energy associated with the ERCOT RECs was produced by a Texas wind turbine facility in 2009, and the RECs were retired for the benefit of EnergyUnited in June 2009, prior to the operation of NC-RETS.
- On June 7, 2011, and July 6, 2011, in Docket Nos. E-100, Sub 130, et al., the Commission issued Orders revoking the registrations of a total of twenty (20) renewable energy facilities for failure to file annual certifications required by Commission Rule R8-66(b).
- On August 26, 2011, in Docket No. E-7, Sub 992, the Commission issued an Order approving a request by Duke Energy Carolinas, LLC (Duke), to transfer into NC-RETS from the ERCOT REC tracking system 250,000 RECS. The energy associated with the ERCOT RECs was produced by a Texas wind turbine facility in 2008, and the RECs were retired for the benefit of Duke in 2008, prior to the operation of NC-RETS.

Members of the public can access the NC-RETS web site at [www.ncrets.org](http://www.ncrets.org). The site's "Resources" tab provides extensive information regarding REPS activities and NC-RETS account holders. NC-RETS also provides an electronic bulletin board where RECs can be offered for purchase.

As of December 31, 2010:

- NC-RETS had issued 4,285,506 renewable energy certificates and 252,607 energy efficiency certificates. These numbers could increase because renewable energy generators are allowed to enter historic production data for up to two years.

- 172 organizations, including electric power suppliers and owners of renewable energy facilities, had established accounts in NC-RETS.
- Approximately 306 renewable energy facilities had been established as NC-RETS projects, enabling the issuance of RECs based on their energy production data.

Pursuant to the MOA, APX has been working with other registries in the United States, such as ERCOT, to establish procedures whereby RECs that were issued in those registries may be transferred to NC-RETS. To date, such arrangements have been established with four (4) such registries. Lastly, the Commission has established an on-going NC-RETS stakeholder group, providing a forum for resolution of issues and discussion of system improvements.

## **Environmental Impacts**

Pursuant to G.S. 62-133.8(j), the Commission was directed to consult with the North Carolina Department of Environment and Natural Resources (DENR) in preparing its report and to include any public comments received regarding direct, secondary, and cumulative environmental impacts of the implementation of the REPS requirements of Senate Bill 3. The Commission has not identified, nor has it received from the public or DENR, any comments regarding direct, secondary, and cumulative environmental impacts of the implementation of the REPS provision of Senate Bill 3. DENR stated that there continues to be interest in the development of renewable energy resources and the REPS appears to have spurred much of this interest. In addition, DENR specifically noted the development of three biomass projects in North Carolina, two of which involve swine waste.

# ELECTRIC POWER SUPPLIER COMPLIANCE

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Pursuant to Senate Bill 3, electric power suppliers are required, beginning in 2012, to meet an increasing percentage of their retail customers' energy needs by a combination of renewable energy resources and energy reductions from the implementation of energy efficiency and demand-side management measures. In addition, beginning in 2010 each electric power supplier was required to meet 0.02% of its 2009 retail electric sales "by a combination of new solar electric facilities and new metered solar thermal energy facilities that use one or more of the following applications: solar hot water, solar absorption cooling, solar dehumidification, solar thermally driven refrigeration, and solar industrial process heat." G.S. 62-133.8(d). An electric power supplier is defined as "a public utility, an electric membership corporation, or a municipality that sells electric power to retail electric power customers in the State." G.S. 62-133.8(a)(3). Described below are the REPS requirements for the various electric power suppliers and, to the extent reported to the Commission, the efforts of each toward REPS compliance.

## **Monitoring of Compliance with REPS Requirement**

Monitoring of electric power supplier compliance with the REPS requirement of Senate Bill 3 is accomplished through annual filings with the Commission. The rules adopted by the Commission require each electric power supplier to file an annual REPS compliance plan and REPS compliance report to demonstrate reasonable plans for and actual compliance with the REPS requirement.

### ***Compliance plan***

Pursuant to Commission Rule R8-67(b), on or before September 1 of each year, each electric power supplier is required to file with the Commission an REPS compliance plan providing, for at least the current and following two calendar years, specific information regarding its plan for complying with the REPS requirement of Senate Bill 3. The information required to be filed includes, for example, forecasted retail sales, RECs earned or purchased, energy efficiency measures implemented and projected impacts, avoided costs, incremental costs, and a comparison of projected costs to the annual cost caps.

### ***Compliance report***

Pursuant to Commission Rule R8-67(c), each electric power supplier is required to annually file with the Commission an REPS compliance report. While an REPS compliance plan is a forward-looking forecast of an electric power supplier's REPS requirement and its plan for meeting that requirement, an REPS

compliance report is an annual look back at the RECs earned or purchased and energy savings actually realized during the prior calendar year and the electric power supplier's actual progress toward meeting its REPS requirement. Thus, as part of this annual REPS compliance report, each electric power supplier is required to provide specific information regarding its experience during the prior calendar year, including, for example, RECs actually earned or purchased, retail sales, avoided costs, compliance costs, status of compliance with its REPS requirement, and RECs to be carried forward to future REPS compliance years. An electric power supplier must file with its REPS compliance report any supporting documentation as well as the direct testimony and exhibits of expert witnesses. The Commission will schedule a hearing to consider the REPS compliance report filed by each electric power supplier.

For each electric public utility, the Commission will consider the REPS compliance report and determine the extent of compliance with the REPS requirement at the same time as it considers cost recovery pursuant to the REPS incremental cost rider authorized in G.S. 62-133.8(h). Each EMC and municipally-owned electric utility, over which the Commission does not exercise ratemaking authority, is required to file its REPS compliance report on or before September 1 of each year.

## Cost Recovery Rider

G.S. 62-133.8(h) authorizes each electric power supplier to establish an annual rider to recover the incremental costs incurred to comply with the REPS requirement and to fund certain research. The annual rider, however, may not exceed the following per-account annual charges:

<u>Customer Class</u>	<u>2008-2011</u>	<u>2012-2014</u>	<u>2015 and thereafter</u>
Residential per account	\$10.00	\$12.00	\$34.00
Commercial per account	\$50.00	\$150.00	\$150.00
Industrial per account	\$500.00	\$1,000.00	\$1,000.00

Commission Rule R8-67(e) establishes a procedure under which the Commission will consider approval of an REPS rider for each electric public utility. The REPS rider operates similar to the fuel charge adjustment rider authorized in G.S. 62-133.2. Each electric public utility is required to file its request for an REPS rider at the same time as it files the information required in its annual fuel charge adjustment proceeding, which varies for each utility. The test periods for both the REPS rider and the fuel charge adjustment rider are the same for each utility, as are the deadlines for publication of notice, intervention, and filing of testimony and exhibits. A hearing on the REPS rider will be scheduled to begin as soon as practicable after the hearing held by the Commission for the purpose of determining the utility's fuel charge adjustment rider. The burden of proof as to whether the REPS costs were reasonable and prudently incurred shall be on the electric public utility. Like the fuel charge

adjustment rider, the REPS rider is subject to an annual true-up, with the difference between reasonable and prudently incurred incremental costs and the revenues that were actually realized during the test period under the REPS rider then in effect reflected in an REPS experience modification factor (REPS EMF) rider. Pursuant to G.S. 62-130(e), any over-collection under the REPS rider shall be refunded to a utility’s customers with interest through operation of the REPS EMF rider.

## Electric Public Utilities

There are three electric public utilities operating in North Carolina subject to the jurisdiction of the Commission: Carolina Power & Light Company, doing business as Progress Energy Carolinas, Inc. (PEC); Duke Energy Carolinas, LLC (Duke); and Virginia Electric and Power Company, doing business in North Carolina as Dominion North Carolina Power (Dominion).

### ***REPS requirement***

G.S. 62-133.8(b) provides that each electric public utility in the State – Duke, PEC and Dominion – shall be subject to an REPS according to the following schedule:

<u>Calendar Year</u>	<u>REPS Requirement</u>
2012	3% of prior year’s North Carolina retail sales
2015	6% of prior year’s North Carolina retail sales
2018	10% of prior year’s North Carolina retail sales
2021 and thereafter	12.5% of prior year’s North Carolina retail sales

An electric public utility may meet the REPS requirement by any one or more of the following:

- Generate electric power at a new renewable energy facility.
- Use 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.
- Reduce energy consumption through the implementation of an energy efficiency measure; provided, however, an electric public utility subject to the provisions of this subsection may meet up to twenty-five percent (25%) of the requirements of this section through savings due to implementation of energy efficiency measures. Beginning in calendar year 2021 and each year thereafter, an electric public utility may meet up to forty percent (40%) of the requirements of this section through savings due to implementation of energy efficiency measures.

- Purchase electric power from a new renewable energy facility. Electric power purchased from a new renewable energy facility located outside the geographic boundaries of the State shall meet the requirements of this section if the electric power is delivered to a public utility that provides electric power to retail electric customers in the State; provided, however, the electric public utility shall not sell the renewable energy certificates created pursuant to this paragraph to another electric public utility.
- Purchase renewable energy certificates derived from in-State or out-of-state new renewable energy facilities. Certificates derived from out-of-state new renewable energy facilities shall not be used to meet more than twenty-five percent (25%) of the requirements of this section, provided that this limitation shall not apply to Dominion.
- Use electric power that is supplied by a new renewable energy facility or saved due to the implementation of an energy efficiency measure that exceeds the requirements of this section for any calendar year as a credit towards the requirements of this section in the following calendar year or sell the associated renewable energy certificates.
- Reduce energy consumption through “electricity demand reduction,” which is a voluntary reduction in the demand of a retail customer achieved by two-way communications devices that are under the real time control of the customer and the electric public utility.<sup>6</sup>

### ***Progress Energy Carolinas***

On September 1, 2011, PEC filed its 2011 REPS compliance plan in Docket No. E-100, Sub 128 as part of its 2011 Integrated Resource Plan (IRP). In its plan, PEC indicated that its overall compliance strategy is to meet the REPS requirements with the most cost-effective and reliable renewable energy resources available. PEC has agreed to provide REPS compliance services for the following wholesale customers, as allowed under G.S. 62-133.8(c)(2)(e): the towns of Black Creek, Lucama, Sharpsburg, Stantonsburg, and Waynesville.

PEC has adopted a competitive bidding process for the purchase of energy or RECs from renewable energy facilities whereby market participants have an opportunity to propose projects on a continuous basis. Through this RFP, PEC has executed fifty (50) contracts for solar, hydro, biomass, landfill gas, and wind RECs. Also, PEC maintains an open RFP for 10 MW or less of non-solar renewable

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<sup>6</sup> Sec. 1 of Senate Bill 75, amended G.S. 62-133.8(a) by adding a definition of “electricity demand reduction,” and Sec. 2 amended G.S. 62-133.8(b)(2) by adding a new subsection (g) making electricity demand reduction a REPS resource, effective April 28, 2011.

resources. In June 2011 PEC issued solar and wind-specific RFPs. PEC stated that it does not currently own or operate new renewable energy facilities. A decision to engage in future direct or partial ownership will be based on 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. However, introducing alternative fuels in traditional power plants must be proven 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.

To meet the initial 0.02% solar set-aside requirement in 2010, PEC prioritized solar bids within its November 2007 renewable RFP and subsequent planning periods. In addition to the renewable RFP, PEC has maintained a commercial solar photovoltaic (PV) program since July 2009 with a target of adding 5 MW of grid-tied solar PV per year and a standard offer to purchase commercial solar hot water RECs to promote development of this technology.

On July 1, 2010, In Docket No. E-2, Sub 979, PEC filed for Commission approval of its Residential Service SunSense Solar Rebate Rider SSR-1 (SunSense). SunSense is an experimental solar PV rebate program aimed at adding 1 MW per year of distributed solar generation. Residential customers who install rooftop solar PV generating systems will receive a one-time participation payment of \$1,000 per kW of installed capacity and monthly bill credits based on the RECs produced by their system. The solar RECs will be the property of PEC. SunSense is limited to 1,000 kW of installed capacity in a calendar year and will be available through December 2015. On November 15, 2010, the Commission issued an Order approving SunSense and granting the participants waivers from several reporting requirements of Commission Rule R8-66 to allow PEC to be the aggregator for information gathering and reporting to the Commission and NC-RETS. PEC initiated SunSense on January 1, 2011.

In its 2011 REPS compliance plan, PEC stated that it is committed to taking all actions necessary to comply with the swine waste set-aside requirements. The state's electric power suppliers issued a joint RFP for swine waste generation on February 15, 2010, and have engaged in negotiations with multiple parties in a joint effort to procure swine waste resources in the state. As a result of the RFP, PEC and other participants in the collaborative have executed two contracts for approximately 20,000 RECs per year once the facilities are fully operative. Although the collaborative continues to negotiate with other potential suppliers, PEC stated that it is doubtful that there will be sufficient energy derived from swine waste within the state to enable PEC to meet the 2012 swine waste set-aside requirement.

PEC is also participating in collective efforts to procure poultry waste derived energy. In April 2011, PEC executed a contract to purchase RECs and energy from a 36 MW poultry waste-to-energy facility. However, PEC cautions that issues similar to those stated for producing sufficient energy derived from swine waste make it uncertain whether PEC will be able to meet the 2012 poultry waste set-aside obligation. In particular, it is uncertain whether there will be sufficient poultry waste facilities in operation to enable PEC to meet the 2012 obligation.

PEC also intends to comply with a portion of the REPS requirement by energy savings from PEC's EE measures. PEC has received approval for a number of EE programs and has begun implementation. PEC forecasts that, with the allowed banking, its EE savings will exceed the limitation imposed in each year for REPS compliance under G.S. 62-133.8(b)(2)(c).

Based on its current contracts, energy efficiency programs and banked RECs, PEC believes that it has procured sufficient resources to meet its general REPS obligation through 2013.

On May 18, 2010, in Docket No. E-2, Sub 974, PEC filed its annual REPS compliance report for the calendar year 2009. On June 4, 2010, PEC filed an application in the same docket for approval of an REPS rider effective December 1, 2010. On November 17, 2010, the Commission issued an Order approving an REPS charge of \$0.58 per month for residential customers, \$2.90 per month for commercial customers, and \$28.93 per month for industrial customers, each of which is below the incremental cost cap established in G.S. 62-133.8(h). These charges are effective December 1, 2010 through November 30, 2011. In addition, the Commission approved PEC's 2009 REPS compliance report, with a brief discussion noting that the 24,930 EE RECs reported therein are subject to measurement and verification (M&V) based on the submission of further M&V data and the resolution of M&V issues pending in Docket No. E-100, Sub 113 with regard to reduced energy consumption.

On June 3, 2011, PEC filed its 2010 REPS compliance report in Docket No. E-2, Sub 1000. Also on June 3, 2011, PEC filed an application in the same docket seeking to increase its REPS rider to \$0.63 per month for residential customers, \$7.61 per month for commercial customers, and \$51.54 per month for industrial customers. In its 2010 REPS compliance report, PEC indicated that it acquired sufficient solar RECs to meet the 2010 requirement of 0.02% of its 2009 retail sales. In addition, PEC stated that counting banked RECs, EE projections, contracted future purchases, and the ability to use 25% out-of-state RECs each year, it expects to have sufficient RECs to achieve REPS compliance through 2014. A hearing was held on PEC's 2010 REPS compliance report and 2011 REPS cost recovery rider on September 27, 2011. A final decision is pending before the Commission.

## ***Duke Energy Carolinas***

On September 1, 2011, Duke filed its 2011 REPS compliance plan in Docket No. E-100, Sub 128 as part of its 2011 IRP. In its plan, Duke stated that it is pursuing REPS compliance by building a diverse portfolio of cost-effective renewable energy and energy efficiency resources. The key components of Duke's plan include: (1) direct investment in renewable energy resources at existing or new Duke-owned assets; (2) partnership with third-party renewable resource suppliers through power purchase agreements; (3) purchases of unbundled RECs from both in-state and out-of-state suppliers; and (4) utilization of cost-effective EE savings. Duke believes that the implementation of these strategies will yield a balanced and prudent portfolio of qualifying resources and a flexible mechanism for REPS compliance. Duke has agreed to provide REPS compliance services for the following wholesale customers, as allowed under G.S. 62-133.8(c)(2)(e): Rutherford EMC; Blue Ridge EMC; the cities of Concord, Highlands, and Kings Mountain; and the towns of Dallas and Forest City.

Duke stated that it is confident that it will meet its solar set-aside requirement under its 2011 REPS obligation, including for those wholesale customers for which it provides REPS compliance services. Duke has elected to pursue the following courses of action to acquire solar resources for compliance: (1) Duke-owned solar photovoltaic distributed generation program; (2) power purchase agreements for solar generation; and (3) purchase of in-state and out-of-state unbundled solar RECs, including RECs from solar thermal facilities. With respect to utility-owned solar resources, Duke received approval from the Commission in 2009 to build, own and operate up to 10 MW of solar photovoltaic projects on customer sites and/or utility-owned property. Duke began construction in the fourth quarter of 2009 and the program was fully implemented in the first quarter of 2011, with the exception of 50 kW. However, a fire at one of the rooftop installations in April 2011 caused Duke to shut down all the facilities in the program. Duke believes that it has determined the cause of the fire and will be able to institute safeguards to prevent such occurrences. Thus, it anticipates placing the facilities back into operation by the fourth quarter of 2011.

In 2008, Duke signed a twenty-year power purchase agreement with SunEdison for the purchase of all electricity generated from a 15.5 MW (AC) solar farm in Davidson County, North Carolina, which is fully operational. Duke has also entered into long-term agreements with FLS Energy and Vanir Energy to purchase solar RECs from water heating installations. As a result of this agreement, FLS and Vanir have installed solar water heating systems at residences, hotels, universities, and commercial sites across North Carolina. Lastly, having found out-of-state solar RECs to be cost-effective when compared to in-state resources, Duke has entered into agreements to procure out-of-state solar RECs up to the 25% out-of-state limitation of this resource. Based on all of its solar resources, Duke is confident that it will meet its solar set-aside obligation through 2013.

Duke's primary strategy for compliance with the swine waste set-aside requirement is to jointly procure energy derived from swine waste resources with PEC and other electric power suppliers. Duke has entered into four long-term REC purchase agreements with developers of swine waste facilities in North Carolina. However, the production dates and projected production estimates for the facilities have materially changed and Duke now believes that compliance with the 2012 swine waste set-aside requirement is unlikely. Duke also has partnered with Duke University to fund a pilot-scale, on-farm, swine waste-to-energy development at Loyd Ray Farm in Booneville, North Carolina. This project is operational and could serve as a model for other hog farms seeking to manage waste while also developing on-farm renewable generation. Duke will receive all of the RECs generated from this project for a period of ten years.

Duke noted that several regulatory and legislative developments during the last two years have materially impacted its efforts to meet the 2012 poultry set-aside requirement. In response, Duke issued an RFP in July 2011 to capitalize on the expanded definition of poultry resources, and has received many compelling proposals. In addition, Duke continues pursuing the purchase of poultry waste derived energy and/or unbundled RECs. To that end, Duke has continued to meet with potential suppliers; reviewed proposals from third-party developers; identified, contacted, and encouraged animal waste-to-energy developers in other states to develop projects in North Carolina; and initiated negotiation with all known, suppliers of resources that qualify for the poultry waste set-aside requirement. While Duke has not reached agreement with any particular supplier of resources that meet the energy derived from poultry waste requirement, it stated that it will continue to make all reasonable efforts to meet the poultry set-aside requirement in 2012.

Aside from the solar, swine waste, and poultry waste set-aside requirements, Duke intends to meet the general REPS requirement beginning in 2012 with EE savings, hydroelectric power, biomass resources, and out-of-state wind RECs. Duke projects that, in concert with its customers, it will achieve more EE savings than can be utilized under REPS for the foreseeable future. Duke plans to use hydroelectric power from three sources to meet the general REPS requirement: (1) small Duke-owned hydroelectric stations; (2) wholesale customers' SEPA allocation; and (3) small hydroelectric facilities that are not owned by Duke. Duke has purchased RECs from twenty-two (22) small hydroelectric power facilities in North and South Carolina which qualify as new renewable energy facilities. Duke stated that it is evaluating a variety of biomass proposals, including landfill gas, wood biomass combustion, biomass gasification, and biomass anaerobic digestion.

As noted previously in this Report, the Commission issued an Order on October 11, 2010, in Docket No. E-7, Subs 339 and 340 accepting registration of Duke's Buck and Lee Steam Stations as renewable energy facilities, and concluding that primary harvest wood products, including wood chips from whole

trees, are “biomass resources” and “renewable energy resources” under G.S. 62-133.8(a)(8). Thus, Duke also intends to self-supply a portion of its biomass portfolio through the co-firing and/or re-powering of Buck and Lee, and perhaps other existing coal stations, with renewable fuel.

Lastly, Duke stated that it continues to investigate the procurement of wind resources for use in meeting the general REPS requirement, including out-of-state wind RECs, delivery of bundled land-based wind energy to its control area, and development of off-shore wind.

Based on its current contracts, self-owned generation, EE programs and banked RECs, Duke stated that it has procured sufficient resources to meet its general REPS obligation through 2013.

On March 10, 2011, in Docket No. E-7, Sub 984, Duke filed its 2010 REPS compliance report and an application for approval of an REPS rider to be effective September 1, 2011. A hearing was held on June 8, 2011, and on August 23, 2011 the Commission issued an Order approving an REPS charge of \$0.49 per month for residential customers, \$2.44 per month for commercial customers, and \$26.97 per month for industrial customers, each of which is below the incremental cost cap established in G.S. 62-133.8(h). In addition, the Commission approved Duke’s 2010 REPS compliance report, including a finding that Duke acquired sufficient solar RECs to meet the 2010 requirement of 0.02% of its 2009 retail sales.

### ***Dominion North Carolina Power***

On July 9, 2010, Dominion filed its 2009 REPs compliance report. The report stated that Dominion had not produced or purchased any RECs in 2009, but intended to use unbundled solar RECs to meet its 2010 and 2011 solar set-aside requirements. On June 22, 2011, the Commission issued an Order requesting that the Public Staff file comments on Dominion’s 2009 compliance report by September 1, 2011. In particular, the Commission requested the Public Staff to assess whether Dominion is likely to meet its future REPS obligations without exceeding the cost caps established under G.S. 62-133.8(h). On August 30, 2011, the Public Staff filed comments concluding that Dominion will be able to meet its REPS obligations for the foreseeable future without exceeding the costs caps and that Dominion’s 2009 REPS compliance report should be approved by the Commission.

On August 25, 2011, in Docket No. E-22, Sub 475, Dominion filed its 2010 REPS compliance report. Dominion has agreed to provide REPS compliance services for the Town of Windsor, as allowed under G.S. 62-133.8(c)(2)(e). Dominion stated that it met its 2010 REPS solar set-aside obligation by purchasing unbundled out-of-state solar RECs. For the Town of Windsor’s

obligation, at least 75% of the RECs purchased were in-state RECs, as required by G.S. 62-133.8(b)(2)(e).

On September 1, 2010, in Docket No. E-22, Subs 463, 467, 468, and 469, Dominion filed four EE programs for approval by the Commission. Dominion projects EE savings of 4,720 MWh in 2011 and 6,119 MWh in 2012 from these programs. On February 22, 2011, the Commission issued Orders approving the four EE programs.

On September 1, 2011, in Docket No. E-100, Sub 128, Dominion filed its 2011 REPS compliance plan as part of its 2011 IRP. In its plan, Dominion stated that it intends to meet its REPS requirements through the use of new renewable energy, EE, and unbundled RECs. Dominion plans to use unbundled solar RECs to meet its 2011 and beyond solar requirements and has entered into contracts to purchase sufficient RECs through 2013. As determined in the Commission's September 22, 2009 Order, Dominion is exempt from the 25% limit on the use of out-of-state RECs for REPS compliance found in G.S. 62-133.8(b)(2)(e). Dominion stated that it had purchased solar RECs for REPS compliance from out-of-state to minimize compliance costs. In addition, Dominion is participating with other electric power suppliers to evaluate proposals from swine and poultry waste energy suppliers to meet the swine and poultry waste set-aside requirements. Dominion has entered into long term contracts with five companies for the purchase of swine waste-to-energy RECs.

Dominion again elected not to file an application for an REPS rider in 2011.

## **Electric Membership Corporations and Municipally-Owned Electric Utilities**

There are thirty-one (31) electric membership corporations (EMCs) serving customers in North Carolina, including twenty-six (26) that are headquartered in the state. Twenty-five of the EMCs are members of North Carolina Electric Membership Corporation (NCEMC), a generation and transmission (G&T) services cooperative that provides wholesale power and other services to its members.

In addition, there are seventy-four (74) municipal and university-owned electric distribution systems serving customers in North Carolina. These systems are members of ElectriCities of North Carolina, Inc. (ElectriCities), an umbrella service organization. ElectriCities is a non-profit organization that provides many of the technical, administrative, and management services required by its municipally-owned electric utility members in North Carolina, South Carolina, and Virginia. ElectriCities is a service organization for its members, not a power supplier. Fifty-one of the North Carolina municipalities are participants in either NCEMPA or NCMPA1, municipal power agencies that provide wholesale power to their members. The remaining municipally-owned electric utilities generate

their own electric power or purchase electric power from wholesale electric suppliers.

By Orders issued August 27, 2008, the Commission allowed twenty-three (23) EMCs to file their REPS compliance plans on an aggregated basis through GreenCo Solutions, Inc. (GreenCo),<sup>7</sup> and the fifty-one (51) municipal members of the power agencies to file through NCEMPA and NCMPA1. On September 7, 2010, the Commission similarly allowed Tennessee Valley Authority to file annual REPS compliance plans and reports on behalf of its four wholesale customers that provide retail service to customers in North Carolina.

### ***REPS requirement***

G.S. 62-133.8(c) provides that each EMC or municipality that sells electric power to retail electric power customers in the State shall be subject to an REPS according to the following schedule:

<u>Calendar Year</u>	<u>REPS Requirement</u>
2012	3% of prior year's North Carolina retail sales
2015	6% of prior year's North Carolina retail sales
2018 and thereafter	10% of prior year's North Carolina retail sales

Compliance with the REPS requirement is slightly different for an EMC or municipality than for an electric public utility. An EMC or municipality may meet the REPS requirement by any one or more of the following:

- Generate electric power at a new renewable energy facility.
- Reduce energy consumption through the implementation of demand-side management or energy efficiency measures.
- Purchase electric power from a renewable energy facility or a hydroelectric power facility, provided that no more than thirty percent (30%) of the requirements of this section may be met with hydroelectric power, including allocations made by the Southeastern Power Administration.
- Purchase renewable energy certificates derived from in-State or out-of-state renewable energy facilities. An electric power supplier subject to the requirements of this subsection may use certificates derived from out-of-state renewable energy facilities to meet no more than twenty-five percent (25%) of the requirements of this section.

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<sup>7</sup> Effective May 1, 2010, Blue Ridge Electric Membership Corporation is no longer a member of GreenCo.

- Acquire all or part of its electric power through a wholesale purchase power agreement with a wholesale supplier of electric power whose portfolio of supply and demand options meet the requirements of this section.
- Use electric power that is supplied by a new renewable energy facility or saved due to the implementation of demand-side management or energy efficiency measures that exceeds the requirements of this section for any calendar year as a credit towards the requirements of this section in the following calendar year or sell the associated renewable energy certificates.
- Reduce energy consumption through “electricity demand reduction,” which is a voluntary reduction in the demand of a retail customer achieved by two-way communications devices that are under the real time control of the customer and electric power supplier.<sup>8</sup>

### ***Electric membership corporations***

#### GreenCo

On September 1, 2009, in Docket No. E -100, Sub 124, GreenCo filed its 2008 REPS compliance report for the twenty-three (23) EMC members that GreenCo served during 2008.<sup>9</sup> On May 11, 2010, the Commission established Docket No. EC-83, Sub 1 and issued an Order scheduling a hearing on GreenCo’s 2008 REPS report and directed GreenCo to file a copy of its 2008 REPS compliance report. The Commission held a hearing on August 24, 2010 and allowed the parties to file briefs and proposed orders by October 21, 2010. On May 3, 2011, the Commission issued an Order approving GreenCo’s 2008 REPs compliance report, with a brief discussion noting that the EE RECs reported therein are subject to measurement and verification (M&V) based on the submission of further M&V data and the resolution of M&V issues pending in Docket No. E-100, Sub 113 with regard to reduced energy consumption.

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<sup>8</sup> Sec. 1 of Senate Bill 75, amended G.S. 62-133.8(a) by adding a definition of “electricity demand reduction,” and Sec. 2 amended G.S. 62-133.8(c)(2) by adding a new subsection (g) making electricity demand reduction a REPS resource, effective April 28, 2011.

<sup>9</sup> The following EMCs are members of GreenCo: Albemarle EMC, Brunswick EMC, Cape Hatteras EMC, Carteret-Craven EMC, Central EMC, Edgecombe-Martin County EMC, Four County EMC, French Broad EMC, Haywood EMC, Jones-Onslow EMC, Lumbee River EMC, Pee Dee EMC, Piedmont EMC, Pitt & Greene EMC, Randolph EMC, Roanoke EMC, South River EMC, Surry-Yadkin EMC, Tideland EMC, Tri-County EMC, Union EMC, and Wake EMC. Effective May 1, 2010, Blue Ridge EMC is no longer a member of GreenCo. The REPS obligations of Mecklenburg Electric Cooperative, headquartered in Chase, Virginia, and Broad River Electric Cooperative, headquartered in Gaffney, South Carolina, are aggregated with the GreenCo members in its REPS compliance plan.

On September 1, 2010, in Docket No. E-100, Sub 128, GreenCo filed its 2009 REPS compliance report for the twenty-three (23) EMC members that GreenCo served during 2009. GreenCo's report stated, among other points, that it had secured adequate resources to meet its solar set-aside obligation for 2010. On January 24, 2011, the Commission held a public hearing on the 2010 IRP's filed by PEC, Duke and Dominion and the REPS compliance reports filed by all the electric power suppliers. The Commission subsequently received comments, reply comments, proposed orders and briefs from the parties. A decision by the Commission is pending.

On September 19, 2011, in Docket No. E-100, Sub 128, GreenCo filed its 2011 REPS compliance plan and 2010 REPS compliance report with the Commission on behalf of its member EMCs, as well as Mecklenburg Electric Cooperative and Broad River Electric Cooperative. In its plan, GreenCo stated that it intends to use its members' allocations from SEPA, RECs purchased from both in-State and out-of-state renewable energy facilities, and EE savings from eleven recently approved EE programs to meet its members' REPS obligations. In addition, GreenCo is continuing to work with the collaborative of other electric power suppliers to meet the swine and poultry set-aside requirements. GreenCo further stated that it plans to evaluate the potential of other EE programs to provide energy savings that could be utilized for REPS compliance. In its 2010 REPS compliance report, GreenCo stated that it secured adequate resources to meet the solar set-aside obligation for 2010, as well as the 2012 and 2013 solar requirement. Lastly, for 2010, the REPS incremental costs incurred by GreenCo's members were significantly less than the costs allowed under the per-account cost cap in G.S. 62-133.8(h).

#### EnergyUnited Electric Membership Corporation

On May 11, 2010, the Commission established Docket No. EC-82, Sub 12 and issued an Order scheduling a hearing for August 17, 2010 on EnergyUnited Electric Membership Corporation's (EnergyUnited) 2008 and 2009 REPS compliance reports. On August 6, 2010, the Commission issued an Order canceling the hearing. EnergyUnited filed a revised 2008 REPS compliance report and 2009 REPS compliance report together with its 2010 IRP on August 27, 2010, in Docket No. E-100, Sub 128.

On August 30, 2011, in Docket No. E-100, Sub 128, EnergyUnited filed its 2011 IRP and REPS compliance plan and 2010 REPS compliance report with the Commission. In its report, EnergyUnited stated that it met its 2010 solar set-aside requirement of 2,230 megawatt hours by purchasing solar RECs. In its 2011 compliance plan, EnergyUnited stated that it has purchased enough solar RECs to meet its 2011 obligation. Over the next two years, EnergyUnited plans to begin evaluating options to fulfill the remainder of its solar needs. In addition, EnergyUnited plans to use landfill gas generation along with RECs from SEPA and others to begin to meet its general REPS obligation in 2012 and beyond.

EnergyUnited is currently in discussions with third parties regarding its obligations under the swine and poultry waste set-aside requirements, and will continue to evaluate options for the most cost-effective means to meet these requirements. In addition, it has purchased small quantities of out-of-state swine and poultry RECs that can be used to meet portions of these set-aside requirements. EnergyUnited further stated that it plans to continue deploying its current EE programs as well as continuing to educate its members on energy efficiency.

#### Tennessee Valley Authority

On September 7, 2010, Order in Docket No. E-100, Sub 129, the Commission issued an Order approving Tennessee Valley Authority's (TVA) request to file an aggregated REPS compliance plan and REPS compliance report on behalf of its four wholesale customers serving retail customers in North Carolina: Blue Ridge Mountain Electric Membership Corporation, Mountain Electric Coop, Inc., Tri-State Electric Membership Corporation, and Murphy Power Board. On November 12, 2010, TVA filed its 2010 REPS compliance plan and 2009 REPS compliance report. The 2010 REPS compliance plan noted that the 2010 solar set-aside requirement for TVA's cooperatives was 116 MWh and its plan for meeting the requirement was to purchase solar RECs. For 2011, the solar set-aside requirement is projected to be 117 MWh and TVA's plan for meeting the cooperatives' requirement is to generate the energy at its facilities and/or purchase solar RECs. For the general 2012 REPS goal of 3%, TVA projected its cooperatives' requirement to be 18,000 MWh. In addition to the swine and solar set-aside portion, this requirement will be met by a combination of wind RECs, hydro generation, demand-side management and energy efficiency.

On August 31, 2011, in Docket No. E-100, Sub 131, TVA filed its 2011 REPS compliance plan and 2010 REPS compliance report with the Commission. With regard to its cooperatives' solar set-aside obligation, TVA reiterated its plans to meet it by generating the energy at its facilities and facilities owned by others, and/or purchasing solar RECs. For the general 2012 REPS goal of 3%, TVA will meet this requirement by a combination of wind RECs, hydro generation, demand-side management and energy efficiency. TVA met its cooperatives' 2010 solar set-aside requirement by purchasing solar RECs.

#### Halifax Electric Membership Corporation

On May 11, 2010, the Commission established Docket No. EC-33, Sub 58, ordered Halifax Electric Membership Corporation (Halifax) to file a copy of its 2008 REPS compliance report, and scheduled a hearing for August 11, 2010. Halifax serves the Town of Enfield and included Enfield's REPS requirement in its report. On May 3, 2011, the Commission issued an Order concluding that Halifax's report did not comply with the requirements of

G.S. 62-133.8 and Commission Rule R8-67, mainly because Halifax had allocated the costs of DSM and EE programs that pre-dated Senate Bill 3 as incremental REPS compliance costs. The Commission held that energy savings from existing EE programs can be counted toward the REPS requirements, but the costs of existing programs are not incremental costs under G.S. 62-133.8(h). The Commission stated, however, that Halifax may be allowed in future proceedings to prove that it has incurred incremental costs associated with new DSM/EE programs, but the reasonableness of such incremental costs will be weighed against Halifax's obligation under G.S. 62-133.9(b) to provide the "least cost mix of demand reduction and generation measures" in serving its customers. The Commission ordered Halifax to file revised 2008 and 2009 REPS compliance reports consistent with the Commission's Order by September 1, 2011.

On October 15, 2010, in Docket No. E-100, Sub 128, Halifax filed its 2010 REPS compliance plan and 2009 REPS compliance report, again including the Town of Enfield's REPS requirement in its plan. Halifax's 2010 REPS compliance plan stated that Halifax's 2010 solar set-aside requirement was 38,740 kWh, and its plan for meeting the requirement was to purchase solar RECs. For 2011, Halifax's solar set-aside requirement is projected to be 39,097 kWh, and Halifax's plan for meeting the requirement is to generate the energy at its 98.56 kW solar PV facility to be completed in the later part of 2010. For the general 2012 REPS goal of 3%, Halifax projected its requirement to be 5.9 MWh. In addition to the swine and solar set-aside portion, this requirement will be met by a combination of SEPA energy entitlements, wind RECs, and energy efficiency.

On August 29, 2011, in Docket No. EC-33, Sub 58, Halifax filed updates to its 2008 and 2009 REPS compliance reports. With regard to the Commission's concern that Halifax's Energy Star Heat Pump Rebate Program (Rebate Program), from which Halifax estimated it earned approximately 11.3 EE RECs in 2008, had not been approved by the Commission. Halifax recounted the history of the Rebate Program, including its approval by Halifax on December 21, 1989, following the Commission's approval of NCEMC's application to offer a heat pump rebate program for new and existing construction in Docket No. EC-67, Sub 4 on October 25, 1989. Halifax was a member of NCEMC at this time and has operated its Rebate Program under the assumption that the approval of NCEMC's application by the Commission was approval of Halifax's Program. Therefore, Halifax requested that the Commission find that the approval of the NCEMC rebate program in Docket No. EC-67, Sub 4 constituted approval of Halifax's Rebate Program. In addition, Halifax's report included amendments to its 2008 and 2009 REPS reports, including adjustments to the cost of some energy efficiency programs and REC balances.

On September 1, 2011, in Docket No. E-100, Sub 128, Halifax filed its 2011 REPS compliance plan and 2010 REPS compliance report with the Commission. In its compliance plan, Halifax stated that it intends to meet its

REPS requirements with a combination of SEPA energy entitlements, EE programs, solar energy production, solar and wind RECs and additional resources to be determined on an ongoing basis. Further, Halifax noted that it is a participant in the collaborative effort of electric power suppliers to meet the swine and poultry set-aside requirements. With regard to its 2010 solar set-aside obligation, Halifax met that requirement by generating solar energy on its 98.56 kW solar PV system and purchasing solar RECs.

On August 30, 2011, the Public Staff filed comments on GreenCo's 2009 REPS compliance report, EnergyUnited's 2008 and 2009 REPS compliance reports and TVA's 2009 REPS compliance report. The Public Staff stated that it found no violations of the REPS statute or Commission's rules in the reports or the compliance efforts of GreenCo and EnergyUnited as summarized in their reports. Further, the Public Staff stated that TVA did not obtain any RECs for the four cooperatives to whom TVA sells electricity and did not impose any RECs incremental costs on the cooperatives. The Public Staff recommended that the Commission approve the GreenCo, EnergyUnited and TVA reports.

### ***Municipally-owned electric utilities***

#### North Carolina Eastern Municipal Power Agency

On August 3, 2010, in Docket No. E-48, Sub 6, the Commission held a hearing to consider NCEMPA's 2008 REPS compliance report. On May 3, 2011, the Commission issued an Order concluding that NCEMPA's report did not comply with the requirements of G.S. 62-133.8 and Commission Rule R8-67 for several reasons. First, NCEMPA allocated the costs of DSM and EE programs that pre-dated Senate Bill 3 as incremental REPS compliance costs. The Commission held that energy savings from existing DSM/EE programs can be counted toward the REPS requirements, but the costs of existing programs are not incremental costs under G.S. 62-133.8(h). The Commission stated, however, that NCEMPA may be allowed in future proceedings to prove that it has incurred incremental costs associated with new DSM/EE programs, but the reasonableness of such incremental costs will be weighed against NCEMPA's obligation under G.S. 62-133.9(b) to provide the "least cost mix of demand reduction and generation measures" in serving its customers. Second, the Commission concluded that it is inappropriate for NCEMPA to include net lost revenues as a cost of REPS compliance. The Commission reasoned that municipal electric suppliers should not be influenced by the possibility that DSM/EE programs will reduce their electric revenues. Even though a municipal electric supplier's recovery of fixed costs will come from fewer kilowatt-hour sales, perhaps resulting in increased rates, the DSM/EE savings will result in a net benefit to its customers. Third, the Commission held that as a general rule a municipal electric supplier cannot rely on its wholesale provider's REPS compliance to satisfy the municipal supplier's REPS obligation. The Commission opined that G.S. 62-133.8(c)(2)(e) does not reduce or eliminate the REPS

obligations of NCEMPA's members merely because the members purchase power from PEC and PEC meets its REPS obligations. An exception noted by the Commission is where the wholesale provider in fact increases its REPS compliance to include the municipal provider's REPS retail sales requirement. In addition, the Commission held that EE RECs reported by NCEMPA are subject to M&V based on the submission of further M&V data and the resolution of M&V issues pending in Docket No. E-100, Sub 113 with regard to reduced energy consumption. The Commission ordered NCEMPA to file revised 2008 and 2009 REPS compliance reports consistent with the Commission's Order by September 1, 2011.

On August 31, 2011, in Docket No. E-100, Sub 131, NCEMPA filed with the Commission on behalf of its members a 2011 REPS compliance plan and 2010 REPS compliance report, along with revised 2008 and 2009 REPS compliance reports. In its 2011 compliance plan, NCEMPA stated that its members are prohibited from purchasing, generating or using renewable energy, including purchases from hydroelectric power facilities (other than its members' SEPA allocations), at least until 2018, under NCEMPA's power supply contract with PEC. NCEMPA stated that its members will meet their REPS requirements by purchasing RECs, as well as utilizing SEPA allocations and EE and DSM savings. NCEMPA identified a number of DSM and EE programs that its members may implement to produce energy savings for REPS compliance. NCEMPA stated that it has entered into contracts to purchase various types of RECs and will continue to investigate the market for unbundled RECs as a cost-effective means of REPS compliance. NCEMPA met its 2010 solar set-aside requirement by purchasing solar RECs. In addition, NCEMPA has executed contracts to purchase sufficient solar RECs to meet its requirements through 2013. In addition, NCEMPA is participating jointly with other electric power suppliers to meet the aggregate swine and poultry waste set-aside requirements beginning in 2012. NCEMPA has entered into agreements for the purchase of both in-state and out-of-state unbundled swine RECs sufficient to meet its REPS obligation in 2013 through 2017. However, because of delays in development of swine waste-to-energy facilities the 2012 goal will not be met. Similarly, NCEMPA has entered into agreements to purchase poultry RECs, but these will not be sufficient to meet the 2012 poultry set-aside requirement and beyond. Finally, NCEMPA estimates that its incremental costs for REPS compliance will be less than its per-account cost cap in 2011 through 2013.

#### North Carolina Municipal Power Agency No. 1

On July 27, 2010, in Docket No. E-43, Sub 6, the Commission held a hearing to consider NCMPA1's 2008 REPS compliance report. On May 3, 2011, the Commission issued an Order concluding that NCMPA1's report did not comply with the requirements of G.S. 62-133.8 and Commission Rule R8-67, mainly because NCMPA1 did not allocate the costs of acquiring RECs in 2008 to NCMPA1's 2008 REPS costs. Rather, NCMPA1 asserted that it had no REPS

obligation in 2008 and, therefore, should defer its allocation of the RECs costs until the RECs are retired for compliance with G.S. 62-133.8. The Commission disagreed, holding that NCMPA1's obligation to meet the general 3% REPS target beginning in 2012 necessitated that NCMPA1 plan for compliance with its REPS obligation by purchasing and banking REPS in 2008 through 2011, and, therefore, the cost of those 2008 RECs should be allocated in 2008. Among other points, the Commission noted that G.S. 62-133.8(b)(2)(f) and (c)(2)(f) authorize electric power suppliers to purchase RECs during 2008 through 2011 and G.S. 62-133.8(h)(4) sets cost caps during 2008 through 2011, even though there is no general REPS obligation during those years. In addition, the Commission held that EE RECs reported by NCMPA1 are subject to M&V based on the submission of further M&V data and the resolution of M&V issues pending in Docket No. E-100, Sub 113 with regard to reduced energy consumption. The Commission ordered NCMPA1 to file revised 2008 and 2009 REPS compliance reports consistent with the Commission's Order by September 1, 2011.

On August 31, 2011, in Docket No. E-100, Sub 131, NCMPA1 filed with the Commission on behalf of its members a 2011 REPS compliance plan and 2010 REPS compliance report, along with revised 2008 and 2009 REPS compliance reports. In its 2011 REPS compliance plan, NCMPA1 stated that, in addition to the implementation of DSM and EE programs by its members, NCMPA1 intends to investigate and develop new renewable energy facilities; review proposals for renewable resources, including biomass, hydro, solar and wind; and negotiate and execute agreements for cost-effective resources. NCMPA1 intends to continue to investigate local, regional, and national markets for cost-effective RECs and may consider issuing an RFP for RECs. NCMPA1 met its 2010 REPS solar set-aside requirement by a combination of purchases of energy from solar facilities and purchases of solar RECs. In addition, it has contracts for the acquisition of sufficient solar RECs to meet its requirements through 2012, and issued an RFP for additional solar resources in July 2011. Further, NCMPA1 intends to identify development opportunities for additional solar facilities to be located within its members' service areas or at municipal customer locations and investigate various other regional supply-side options. NCMPA1 is participating jointly with other electric power suppliers to meet the swine and poultry waste set-aside requirement beginning in 2012. NCMPA1 has entered into agreements for the purchase of both in-state and out-of-state unbundled swine RECs sufficient to meet its REPS obligation in 2013 through 2017. However, because of delays in development of the swine waste-to-energy facilities the 2012 goal will not be met. NCMPA1 has entered into agreements to purchase combination biomass and poultry waste in-state RECs and poultry out-of-state RECs sufficient to meet the 2012 poultry set-aside requirement. NCMPA1 is pursuing the procurement of other poultry RECs to meet its 2013 requirement. Finally, NCMPA1 estimates that its incremental costs for REPS compliance will be less than its per-account cost cap in 2011 through 2013.

## Fayetteville Public Works Commission, Winterville and Oak City

On October 15, 2010, in Docket No. E-100, Sub 129, Fayetteville Public Works Commission (FPWC) filed its 2009 REPS compliance report. The report stated that FPWC has engaged in several activities that resulted in FPWC's receipt of RECs to be carried forward for use in complying with FPWC's REPS obligations in 2010 and beyond. Examples discussed in the report include the distribution of free compact fluorescent light bulbs (CFLs) to FPWC's customers in 2008 and 2009, the \$martWorks pilot program that has yielded reductions in energy use by 100 customers, and FPWC's 2009 SEPA allocation. In addition, FPWC noted that it completed work on its LEED-certified customer service center in late November 2009, and anticipates that the energy savings at this facility will be significant in 2010 and later years.

On October 13, 2010, in Docket No. E-100, Sub 129, the towns of Winterville and Oak City filed their 2009 REPS compliance reports. Winterville stated that in 2009 it earned a total of 33 RECs by operation of the town's CFL and energy savings kit programs. These RECs will be carried forward for use in meeting Winterville's future REPS obligations.

Oak City's report stated that the town did not purchase or produce any RECs in 2009. In a corresponding 2010 REPS compliance plan filed on October 13, 2010, Oak City stated that it is studying various REPS compliance strategies and expects that the town's primary strategy will involve EE programs.

The Commission issued an Order requesting that the Public Staff review the 2009 REPS compliance reports of TVA, FPWC, Winterville and Oak City and provide the Commission with comments by September 1, 2011. Further, the Commission invited comments by other parties on these reports by the same date.

On August 30, 2011, in Docket No. E-100, Sub 129 the Public Staff filed comments on the 2009 REPS compliance reports of Winterville, Oak City and FPWC. The Public Staff recommended that the Commission approve the Winterville and Oak City reports as filed. With regard to FPWC's report, the Public Staff noted FPWC's request to rely on REPS compliance by its wholesale power supplier, Progress Energy Carolinas, and FPWC's inclusion of lost retail sales in its REPS costs were inconsistent with Commission decisions, noting that after FPWC filed its 2009 report the Commission decided in Docket E-48, Sub 6 that as a general rule neither a cooperative or municipal electric supplier can rely on its wholesale provider's REPS compliance, and that it is not acceptable for a cooperative or municipal supplier to include lost retail revenues as a cost of REPS compliance. After noting two additional exceptions, the Public Staff recommended that the Commission approve FPWC's 2009 compliance report.

On August 31, 2011, in Docket No. E-100, Sub 131, Winterville filed its 2011 REPS compliance plan and 2010 REPS compliance report. Winterville stated that it continues to implement existing EE and investigate the potential for implementing new programs. Existing programs include energy saver kits, CFL discounts, home energy audits and the Energy Star New Home Program. Winterville stated that it has earned RECs by operation of the town's energy savings programs and these will be carried forward for use in meeting Winterville's future REPS obligations. In addition, the town plans to purchase solar RECs to meet its 2011 through 2013 solar set-aside requirement. Winterville's 2010 REPS compliance report stated that it met its 2010 solar set-aside obligation by purchasing solar RECs.

On September 1, 2011, in Docket No. E-100, Sub 131, FPWC filed its 2011 REPS compliance plan and 2010 REPS compliance report. FPWC's compliance plan stated that it has continued several efforts resulting in FPWC's receipt of RECs to be carried forward for use in complying with FPWC's REPS obligations in 2011 and beyond. Examples include the \$martWorks pilot program that has yielded reductions in energy use by customers, and FPWC's SEPA allocations. In addition, FPWC noted the energy savings produced by its LEED-certified customer service center, as well as plans to implement an LED street light program, HVAC replacement program and additional building modification programs expected to yield EE RECs in 2011 and later years. FPWC is participating jointly with other electric power suppliers to meet the aggregate swine and poultry waste set-aside requirements beginning in 2012. In addition, FPWC plans to purchase sufficient solar RECs to meet its requirements through 2012. For 2013, FPWC intends to facilitate the development of a solar facility that will provide a portion of its RECs and purchase the remaining portion on the open market. In its 2010 REPS compliance report, FPWC stated that it met its 2010 solar set-aside requirement by purchasing solar RECs.

On September 2, 2011, Oak City filed its 2011 REPS compliance plan and 2010 REPS compliance report. Oak City's compliance plan stated that it will continue to consider EE options, but will need to purchase RECs to meet its requirements during the next few years. In addition, the town's swine and poultry set-aside portion is so small that it does not plan to participate in the negotiations being conducted by the larger electric suppliers. However, the town will consider purchasing swine and poultry RECs if any are available. Oak City's 2010 REPS compliance report stated that it acquired one solar REC to meet the 2010 solar set-aside requirement.

#### Town of Fountain

The Town of Fountain did not file a REPS compliance report for 2008 or 2009 or a REPS compliance plan in 2008, 2009 or 2010. On June 22, 2011, in Docket No. E-100, Sub 129, the Commission issued an Order requiring Fountain to file its 2008, 2009 and 2010 REPS compliance reports, as well as its 2010 and

2011 REPS compliance plan, by September 1, 2011. On September 20, 2011, the Commission received a letter from Fountain's attorney stating that the Town had assumed that REPS reports on its behalf were being filed by the Town's electric supplier, Pitt-Greene EMC. However, the Town recently learned that this was not the case. The letter stated that the Town is working on the REPS reports and will submit them no later than December 31, 2011.

#### Wholesale Providers Meeting REPS Requirements

PEC, as the wholesale provider, has agreed to meet the REPS requirements for the towns of Black Creek, Lucama, Sharpsburg, Stantonsburg, and Waynesville. Similarly, Duke has agreed to meet the REPS requirements for Rutherford EMC, Blue Ridge EMC, the towns of Dallas and Forest City, and the cities of Concord, Highlands and Kings Mountain. Dominion has agreed to meet the REPS requirements for the Town of Windsor. The towns of Macclesfield, Pinetops, and Walstonburg have previously filed letters stating that the City of Wilson, as their wholesale provider, has agreed to include their loads with its own for reporting to NCEMPA for REPS compliance.

# RECOMMENDATION

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The Commission recommends that G.S. 62-300 be amended to add a \$25.00 filing fee for applications for registration of renewable energy facilities. The Commission has received more than 1,300 reports of proposed construction and registration applications since the implementation of Senate Bill 3. A reasonable fee for registration applications will help defray the cost of processing the applications and issuing orders of registration.

# CONCLUSIONS

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All of the electric power suppliers except for the Town of Fountain appear to have met the 2010 solar set-aside requirement of Senate Bill 3. However, as stated in the 2010 Report and as highlighted again in this report, numerous issues continue to arise in the implementation of Senate Bill 3 that have required interpretation by the Commission of the statutory language: e.g., the definition of biomass, the electric power suppliers' obligations under the set-aside provisions, the eligibility of renewable energy facilities and resources to meet the set-aside provisions, etc. If the plain language of the statute was ambiguous, the Commission attempted to discern the intent of the General Assembly in reaching its decision on the proper interpretation of the statute.

# APPENDICES

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## APPENDICES

1. Docket No. E-100, Sub 113, In the Matter of Rulemaking Proceeding to Implement Session Law 2007-397
  - Letter from Chairman Edward S. Finley, Jr., North Carolina Utilities Commission, to Secretary Dee Freeman, North Carolina Department of Environment and Natural Resources (June 1, 2011)
  - Letter from Robin W. Smith, Assistant Secretary for Environment, North Carolina Department of Environment and Natural Resources, to Chairman Edward S. Finley, Jr., North Carolina Utilities Commission (August 22, 2011)
  - Order Denying the Use of Thermal RECs to Satisfy Poultry Waste Set-Aside Requirement (October 8, 2010)
  - Order on Cost Recovery of Swine and Poultry Waste Energy by an Electric Public Utility(November 23, 2010)
  - Order Amending Rules R8-64 Through R8-69 and Adopting Final NC -RETS Operating Procedures, (January 31, 2011)
  
2. Renewable Energy Facility Registrations
  - Order Accepting Registration of New Renewable Energy Facilities Fueled by Co-Firing Biomass, Including Primary Harvest Whole Trees, Docket No. E-7, Subs 939 and 940 (October 11, 2010)
  - Order Declaring Yard Waste, Municipal Solid Waste and the Percentage of Syngas Derived from Yard Waste and Municipal Solid Waste to be Renewable Energy Resources, Docket No. SP-100, Sub 28 (April 18, 2011)
  - Order Accepting Registration of a New Renewable Energy Facility Producing Electricity and Steam from Landfill Gas, Docket No. SP-100, Sub 9 (July 5, 2011)

- Orders Accepting Registrations of New Renewable Energy Facilities Producing Solar Thermal Hot Water, Docket Nos. RET-4, Sub 5 and RET-8, Subs 12, 13 and 14 (August 15, 2011)

### 3. Miscellaneous Dockets

- Order Extending Deadline for the Issuance of Historic RECS, Docket No. E-100, Subs 113 and 121 (December 10, 2010)
- Order Granting Request to transfer Renewable Energy Certificates, Docket No. EMP-17, Sub 1 (March 25, 2011)
- Order Revoking Registrations of New Renewable Energy Facilities, Docket Nos. E-100, Sub 130 et al. (June 7, 2011 and July 6, 2011)
- Order Granting Request to transfer Renewable Energy Certificates, Docket No. E-7, Sub 992 (August 26, 2011)
- Order Approving REPS and REPS EMF Riders, Docket No. E-2, Sub 974 (November 17, 2010)
- Order Approving REPS and REPS EMF Riders, Docket No. E-7, Sub 984 (August 23, 2011)

# **APPENDIX 1**



# State of North Carolina

## Utilities Commission

4325 Mail Service Center  
Raleigh, NC 27699-4325

COMMISSIONERS  
EDWARD S. FINLEY, JR., CHAIRMAN  
LORINZO L. JOYNER  
WILLIAM T. CULPEPPER, III

June 1, 2011

COMMISSIONERS  
BRYAN E. BEATTY  
SUSAN W. RABON  
TONOLA D. BROWN-BLAND  
LUCY T. ALLEN

Secretary Dee Freeman  
North Carolina Department of  
Environment and Natural Resources  
1601 Mail Service Center  
Raleigh, NC 27699-1601

Dear Secretary Freeman:

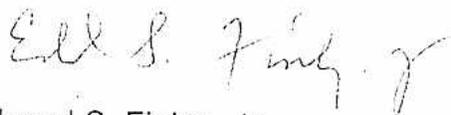
In August 2007, the North Carolina General Assembly enacted comprehensive energy legislation, Session Law 2007-397 (Senate Bill 3), that, among other things, establishes a Renewable Energy and Energy Efficiency Portfolio Standard (REPS) for this State. As part of this legislation, the General Assembly requires the Commission to submit an annual report no later than October 1 of each year on the activities taken by the Commission to implement and by the electric power suppliers to comply with the REPS requirement. The Commission is further required pursuant to G.S. 62-133.8(j) to consult with the Department of Environment and Natural Resources and include in its report "any public comments received regarding direct, secondary, and cumulative environmental impacts of the implementation of" the REPS requirement.

The Commission is not aware of the receipt of any public comments related to this issue. In order to respond to the General Assembly, I am requesting that the Department provide to the Commission any information it may have "regarding direct, secondary, and cumulative environmental impacts of the implementation of" the REPS requirement, including any public comments received by the Department. Your response by August 1, 2011, is appreciated so that the Commission may meet its deadline.

Secretary Dee Freeman  
June 1, 2011  
Page 2

Please feel free to contact me if you have any questions. With warmest personal regards, I am

Very truly yours,

A handwritten signature in cursive script that reads "E. S. Finley, Jr." with a stylized flourish at the end.

Edward S. Finley, Jr.

ESF/LSW

cc: Robin W. Smith, Assistant Secretary for Environment, DENR  
James C. Gulick, North Carolina Attorney General's Office



## North Carolina Department of Environment and Natural Resources

Beverly Eaves Perdue, Governor

Dee Freeman, Secretary

August 22, 2011

Mr. Edward S. Finley, Jr. Chairman  
N.C. Utilities Commission  
4325 Mail Service Center  
Raleigh, N.C. 27699-4325

Dear Mr. Finley:

I am writing in response to your letter of June 1, 2011 to Secretary Freeman requesting any public comment that the Department of Environment and Natural Resources may have received regarding the direct, secondary and cumulative environmental impacts of the implementation of the Renewable Energy and Energy Efficiency Portfolio Standard (REPS).

There continues to be interest in development of renewable energy sources. We are aware of ongoing discussions between the utilities and entrepreneurial companies seeking to build renewable energy facilities in the state ranging from wind farms to biomass combustion sources. The REPS seems to have spurred much of that interest and activity.

The Loyd Ray Farm in Yadkin County has begun generating methane from swine waste and using it to operate equipment on the farm. It is our understanding that none of the energy generated on the farm goes to the grid, but use on the farm gives Duke Energy RECS that count towards Senate Bill 3 goals. This project also received funding from the Lagoon Conversion Program in the Division of Soil and Water Conservation and meets the Performance Standard Rules for new and expanded swine farms. In that respect, the renewable energy project also makes progress toward the state's goal of using environmentally superior systems for managing swine waste.

The Division of Water Quality also has a permit application for the Butler Farm in Harnett County. This farm will construct an in-ground digester to generate methane from swine and food waste, which will be used to generate electricity to go back on the grid. South River will get the RECS for this project. If the project moves forward, it will (like the Loyd Ray Farm project) provide the additional benefit of improved waste treatment for swine waste.

Several other proposals using animal waste (both swine and poultry waste) to generate electricity are under discussion. At least two are linked to Progress Energy's request for proposals under Senate Bill 3.

A multi-use industrial development still in the planning stages for the Charlotte-Mecklenburg area has proposed a waste-to-energy facility. The Reventure project received permission from the General Assembly to receive some of the renewable energy credits originally earmarked in Session Law 2007-397 for energy sources that use poultry litter as fuel although the facility's intended fuel source would be solid waste.

We do not have public comment on the animal waste projects described above; those particular types of permits do not require public notice and comment. The Reventure project will potentially need a broader range of state and federal permits depending on the final scope of the project; as a result, the project may require public notice and comment on one or more permits. That will have to be determined as the developer actually moves into the permit application process.

Please call me at 919-715-4141 if you have questions.

Sincerely,

Robin W. Smith  
Assistant Secretary for Environment

Cc: Secretary Freeman

One  
North Carolina  
*Naturally*

**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

DOCKET NO. E-100, SUB 113

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of		
Rulemaking Proceeding to Implement	)	ORDER DENYING PETITION
Session Law 2007-397	)	TO MODIFY POULTRY WASTE
	)	SET-ASIDE REQUIREMENT

BY THE COMMISSION: On August 10, 2010, Peregrine Biomass Development Company, LLC (Peregrine), filed a Petition requesting that the Commission exercise its discretionary authority pursuant to G.S. 62-133.8(i)(2) (the off-ramp) to allow renewable energy certificates (RECs) associated with the thermal energy output of a combined heat and power (CHP) facility which uses poultry waste as a fuel to count toward the poultry waste set-aside requirement of G.S. 62-133.8(f).

On August 25, 2010, the Commission issued an Order Requesting Comments on the Use of Thermal RECs to Satisfy Poultry Waste Set-Aside Requirement in this docket. In its August 25, 2010 Order, the Commission noted that, in Docket No. SP-578, Sub 0, Green Energy Solutions NV, Inc. (GES), the owner of another CHP facility that uses, in part, poultry waste as fuel, filed a Motion for Clarification seeking an interpretation by the Commission that the statute allows the use of both RECs associated with electric power and thermal energy to meet the poultry waste set-aside requirement. The Public Staff, in its comments, argued that G.S. 62-133.8(f) only allows electric power suppliers to claim REPS credit against their poultry waste set-aside requirements for the electric power (but not the thermal energy) produced by a generating station which uses poultry waste. As a result of the Public Staff's comments, GES withdrew its Motion. In its August 25, 2010 Order, the Commission directed the parties to file comments on both the issue raised by Peregrine, whether the Commission should invoke the off-ramp to allow thermal RECs to be used to satisfy the poultry waste set-aside requirement, and the issue originally raised by GES, whether it is necessary to invoke the off-ramp to allow thermal RECs to be used to satisfy the poultry waste set-aside requirement.

Progress Energy Carolinas, Inc. (PEC); GreenCo Solutions, Inc. (GreenCo); and the North Carolina Poultry Federation (NCPF) filed letters in support of Peregrine's Petition before the Commission's August 25, 2010 Order was issued. Comments were filed by the following parties in response to the Commission's August 25, 2010 Order: Peregrine, GES, Duke Energy Carolinas, LLC (Duke); North Carolina Municipal Power Agency No. 1 and North Carolina Eastern Municipal Power Agency (collectively, Power Agencies); ElectriCities of North Carolina, Inc. (ElectriCities); Fayetteville Public Works Commission (FPWC); FLS Energy, Inc. (FLS); Fibrowatt, LLC (Fibrowatt); Organic

Recycling Systems, Inc. (ORS); Weyerhaeuser; and the Public Staff. The comments filed by Daren Bakst and KapStone Kraft Paper Corporation (KapStone), neither of which have intervened as parties in this proceeding, shall be considered as consumer statements of position. Reply comments were filed by Peregrine; PEC, Power Agencies, ElectriCities, and GreenCo, jointly; North Carolina Sustainable Energy Association (NCSEA); and the Public Staff.

## POSITION OF THE PARTIES

### Duke, PEC, GreenCo, FPWC, FLS, ORS and NCPF

Duke, PEC, GreenCo, FPWC, FLS, ORS and NCPF all support Peregrine's Petition and argue that it is in the public interest for the Commission to invoke the off-ramp to allow thermal RECs to meet the poultry waste set-aside requirement, G.S. 62-133.8(f). Several parties urged the Commission to similarly modify the swine waste set-aside provision, G.S. 62-133.8(e), which is worded nearly identical, in relevant part, to the poultry waste set-aside provision.

Duke, for example, argues in its comments that allowing RECs associated with the thermal energy output of a poultry waste fueled CHP facility is in the public interest and will benefit the retail customers of the State by providing a cost-effective option for electric power suppliers to use for compliance with the poultry waste set-aside requirement. Duke agrees with the Public Staff's earlier comments that the statute does not currently permit the use of RECs associated with thermal energy for compliance with the poultry waste set-aside requirement. Thus, for the Commission to allow thermal energy RECs to meet the poultry waste set-aside requirement, it must invoke the off-ramp provision of Senate Bill 3 and the Commission's rules. Duke argues that the applicable standard for review of Peregrine's application under Senate Bill 3 and the Commission's rules is whether the requested modification of the poultry waste set-aside provision is "in the public interest." Since Peregrine is not an "electric power supplier," the specific requirement relating to a demonstration of "reasonable efforts to comply" do not apply to Peregrine. Duke believes that Peregrine's requested modification is in the public interest because the addition of thermal RECs to the portfolio of qualifying resources for the poultry waste set-aside requirement will serve to broaden options for the electric power suppliers and provide a more cost-effective compliance resource for this set-aside requirement, thereby benefitting retail customers.

In their joint reply comments, PEC, Power Agencies, ElectriCities and GreenCo offer several other justifications in support of Peregrine's Petition: (1) that the use of steam is very efficient, and to not allow thermal RECs to satisfy the set-aside requirements is essentially wasting renewable energy; (2) that, because the number of potential generators is limited, allowing generators of thermal RECs to compete will enhance the market and create additional opportunities to satisfy the set-aside requirements; and (3) the more technologies available to meet the set-aside requirements will result in greater opportunities for electric power suppliers to meet the requirements and greater price competition.

## Power Agencies and ElectriCities

In their comments, Power Agencies and ElectriCities argue that the Commission, in its January 20, 2010 Order accepting registration of GES's facility, has already determined that the statute allows the use of thermal RECs to satisfy the poultry waste set-aside requirement:

The Commission would not require GES to regularly provide data to the REC tracking system regarding "qualifying thermal energy generation data" and the percent of those "energy streams" that is ultimately derived from poultry waste versus other biomass materials unless the "useful" thermal energy used to heat the Collins Chick Farm is eligible to meet the poultry waste set-aside and produce poultry waste RECs.

Nevertheless, Power Agencies and ElectriCities support the Petition filed by Peregrine. The use of the off-ramp is in the public interest because to not do so will inhibit the development of a robust, competitive poultry waste generating industry and result in unnecessarily high costs for REPS compliance that will ultimately be paid for by North Carolina ratepayers.

## Weyerhaeuser and KapStone

In their comments, Weyerhaeuser and KapStone also supported Peregrine's Petition, each stating an interest in developing CHP at their plant. Weyerhaeuser argues that the REPS "should embrace the increased efficiency of CHP facilities by recognizing the useful thermal energy derived from such facilities" and that low-cost, reliable steam generated from such a facility could help its mills be more competitive. KapStone similarly states that a competitively priced reliable source of steam will help it remain economically viable in a very competitive business environment, and argues that "without the useful thermal energy counting toward the poultry waste set-aside requirement, the electric suppliers will not pay a price for the renewable attributes that will support these type projects."

## Fibrowatt

In its comments, Fibrowatt opposes Peregrine's request, arguing that it will further delay the effort to comply with the poultry waste set-aside requirement. Fibrowatt agrees with the Public Staff that the statute allows only "electric power sold to retail electric customers" to satisfy the poultry waste set-aside requirement. It disagrees with Peregrine that a modification is necessary to allow the development of a robust, competitive poultry waste generating industry or that without thermal energy credits the poultry waste generating industry in North Carolina would be expensive and non-competitive, stating that "[t]here is absolutely no evidence to support this, and much of the data in this regard is currently the subject of private commercial discussions." Fibrowatt argues that there are ample competitive, affordable proposals to meet the poultry waste set-aside requirement currently before the electric power suppliers in

North Carolina that can meet the poultry waste set-aside requirement without the requested change of law. As evidence of this, Fibrowatt notes that the electric power suppliers dropped their August 2009 Joint Motion to delay and reduce the poultry waste set-aside requirement:

Serious and advanced discussions are ongoing between the electric suppliers and several other providers of poultry waste generated power. The parties who have labored to form these contracts have done so on the belief that the rules would not change at the last minute.

### Bakst and NCSEA

In his comments, Bakst agrees with the Public Staff that the statute does not allow the use of thermal RECs to satisfy the poultry waste set-aside requirement: “The legislature made a choice, right or wrong, to exclude thermal energy to meet the poultry set-aside. The express language is not in dispute.” Bakst further opposes Peregrine’s Petition to alter the set-aside provision on the basis that the Commission has limited authority under the off-ramp provision and that such authority is insufficient to allow the Commission to grant the Petition. Bakst notes that the off-ramp provision only allows the Commission to “modify or delay” certain provisions of the statute. In analyzing the word “modify,” Bakst concludes that the Commission has the authority to make the requirements of Senate Bill 3 “less extreme” if compliance is not feasible, but that the Commission cannot “add new language to the law or make its own substantive policy decisions”:

The legislature did not use the word “change” or “revise” in the off-ramp provision. It chose “modify” because it envisioned the Commission needing to make slight alterations to existing requirements in the law. If the Commission makes a policy decision by completely changing the statute as is being requested, the Commission would be ignoring the express will of the legislature and replacing it with its own views. To add thermal energy is to create new language that is in no way connected to the express language and intent of the provision being modified. ... Creating new language out of whole cloth, without being constrained by the statutory provision being modified, would give the Commission carte blanche to pass its own legislation. ... Peregrine’s arguments regarding the public interest may be compelling. However, the legislature has made a choice not to include thermal energy. If Peregrine seeks a change, it should go to the legislature and convince them to change the law. It is not the Commission’s role to do the legislature’s job, as Peregrine would like it to do. [Emphasis in original.]

NCSEA, in its reply comments, echoes Bakst’s concerns that the modification sought violates the doctrine of separation of powers. While NCSEA does not oppose Peregrine’s substantive proposal, it argues that Peregrine’s request must be denied.

NCSEA argues that Peregrine's request to the Commission is a broad, substantive change:

In every sense, the change requested by Peregrine would be an amendment to the REPS Law, not just the exercise of enforcement discretion. If the off-ramp provision were to operate so broadly, it would put the Commission in the place of the General Assembly, vitiate the separation of powers doctrine and violate the federal and state Constitutions. The executive branch executes and administers the law and has broad enforcement discretion; it does not enact, amend or repeal laws. Thus, the off-ramp allows the Commission to address compliance by delaying compliance dates or modifying compliance targets; it does not allow the Commission to enact a whole new method of compliance. That is precisely what Peregrine is asking the Commission to do. If the changes Peregrine wants are beneficial and promote the public policy, the appropriate venue for making that correction or change is the General Assembly.

### Peregrine

In its Petition, Peregrine argued that, while the Public Staff's position in the GES matter that thermal RECs may not be used to meet the poultry waste set-aside requirement is not unreasonable, it will inhibit the development of a robust, competitive poultry waste generating industry and will result in unnecessarily high costs for REPS compliance to both the electric power suppliers and their customers. Peregrine further argued that the current opportunity for the development of poultry waste electric-only power generation is, essentially, a very narrow and limited marketplace. As long as this remains the case, development of efficient, economical, competitive poultry waste generation will be stifled. Use of the off-ramp provision by the Commission to encourage renewable energy development and competition by allowing the poultry waste set-aside provision to recognize both the useful thermal and electric energy is in the public interest and ought to be approved.

In its initial comments, Peregrine disagrees with the Public Staff and argues that the language of the poultry waste set-aside provision only requires that a specific resource – poultry waste – be used to meet the set-aside requirement, not that only electric power, a means of compliance, may be used to meet the requirement. The Commission should resolve the issue in this proceeding by clarifying that the poultry waste set-aside provision allows the use of thermal RECs rather than by invoking the off-ramp. However, should the Commission determine that the use of thermal RECs cannot be accomplished without using the off-ramp, then Peregrine requests that the Commission do so as quickly as possible.

In its reply comments, Peregrine notes that most of the comments received strongly support its Petition. Only the comments of Fibrowatt and Bakst oppose Peregrine's Petition. Peregrine argues that "modify" should not be interpreted as Bakst

argues; rather, the delegation of authority in the off-ramp provision allows the Commission

to “fine tune” Senate Bill 3 so that it would work to achieve the best methodologies for obtaining the policy goals specified by the General Assembly. Neither Peregrine nor any other party is suggesting that the Commission change the overall REPS goals of the statute. To the contrary, Peregrine and its supporters are simply urging the Commission to take steps which will allow the statute to work as the General Assembly intended.

Peregrine further disagrees with Fibrowatt’s assertions and challenges Fibrowatt’s motives as a high-cost supplier of poultry waste derived energy. Peregrine notes that months of negotiations have resulted in no contract between Fibrowatt and the State’s electric power suppliers because of Fibrowatt’s “highly elevated costs. ... It is the Fibrowatt ox which is being gored; it is not surprising that they are opposed.”

### Public Staff

In its comments, the Public Staff supports Peregrine’s Petition to modify the poultry waste set-aside requirement: “By exercising its off-ramp authority as Peregrine has proposed, the Commission will facilitate the efforts of the State’s electric power suppliers to satisfy the poultry waste set-aside at a reasonable cost.” The Public Staff reiterated its position that the current provision does not allow the use of thermal RECs, but agreed with Peregrine that the language is too restrictive, stating:

[It] would be desirable if facilities that generate electricity from poultry litter could use their waste heat to earn thermal RECs that are eligible for [sic] meet the poultry waste set-aside. However, in the Public Staff’s view, the best way to achieve this result is by modifying the provisions of subsection (f) pursuant to the off-ramp, rather than by adopting a strained interpretation of the existing language that could be reversed on appeal.

Thus, for the reason advanced by Peregrine, the Public Staff strongly supports Peregrine’s Petition. With regard to procedure, the Public Staff states that Peregrine, which is not an electric power supplier, is not required to demonstrate the reasonableness of the electric power suppliers’ efforts to comply with the statute. The Public Staff states that Peregrine’s verified Petition provides a prima facie demonstration of the need for a modification of the poultry waste set-aside on a statewide basis. There is no need for any further demonstration that a modification is needed by any specific supplier or group of suppliers. Lastly, the Public Staff notes that the off-ramp

constitutes an unusual delegation of legislative authority (with appropriate limitations and guidelines) to an administrative agency. As such, it reflects the General Assembly’s confidence in the Commission. The Commission

should not be hesitant to exercise the authority granted by subdivision (i)(2), but it should, and undoubtedly will, conduct this and other off-ramp proceedings with great care, ensuring that interested parties have the opportunity to present all relevant facts and put forth all their arguments for and against the proposed modification.

In its reply comments, the Public Staff disagrees with the comments of Fibrowatt and Bakst. First, the Public Staff disagrees that a modification will result in delay; however, even if it does, it is outweighed by a reduction in the cost of compliance with the set-aside requirement. Second, using its own analysis of the word “modify,” the Public Staff disagrees with Bakst’s contention that the only allowable modifications under the off-ramp are those which narrow, rather than expand, a statutory provision. The Public Staff further disagrees with Bakst that the off-ramp is an unlawful delegation of legislative power because the Commission is provided with adequate standards to govern its decisions – that any modification be “in the public interest.”

## DISCUSSION AND CONCLUSIONS

The Commission agrees with the Public Staff and others that thermal RECs may not be used to meet the swine and poultry waste set-aside requirements, as written. G.S. 62-133.8(f) provides, in pertinent part, as follows:

For calendar year 2014 and each calendar year thereafter, at least 900,000 megawatt hours of the total electric power sold to retail electric customers in the State shall be supplied, or contracted for supply in each year, by poultry waste combined with wood shavings, straw, rice hulls, or other bedding material.

The language of this provision stands in stark contrast with that of G.S. 62-133.8(d), the solar set-aside, which provides, in pertinent part, as follows:

For calendar year 2018 and for each calendar year thereafter, at least two-tenths of one percent (0.2%) of the total electric power in kilowatt hours sold to retail electric customers in the State, or an equivalent amount of energy, shall be supplied by a combination of new solar electric facilities and new metered solar thermal energy facilities.... [Emphasis added.]

Thus, the General Assembly explicitly included thermal RECs for compliance with the solar set-aside requirement, and knew how to do so had it wanted to allow useful, measurable thermal energy derived from poultry waste to satisfy the set-aside requirement. In addition, the General Assembly drew a distinction between electric power generated by renewable energy resources, on the one hand, and useful, measurable thermal energy generated by renewable energy resources, on the other, in at least two other sections of G.S. 62-133.8. For example, in G.S. 62-133.8(a)(7), the General Assembly defined a "renewable energy facility" as one that either (a) generates electric power by use of a renewable energy resource or (b) generates useful,

measurable thermal energy by the use of a renewable energy resource, including solar thermal and CHP. In addition, in G.S. 62-133.8(a)(8), the legislature defined a "renewable energy resource" as, among other things, "waste heat derived from a renewable energy resource and used to produce electricity or useful, measurable thermal energy." Thus, the General Assembly distinguished between electric power produced by a renewable energy resource and thermal energy produced by a renewable energy resource, and it did not include both types in the poultry waste set-aside provision as it did in the solar set-aside provision. The same reasoning also applies to the swine waste set-aside provision, G.S. 62-133.8(e). The swine and poultry waste set-aside provisions do not contain language similar to that of the solar set-aside provision; they only refer to "electric power." The statute allows CHP facilities to qualify as renewable energy facilities or new renewable energy facilities and earn RECs for the waste heat used to produce "useful, measurable thermal or mechanical energy at a retail electric customer's facility" to satisfy the general REPS requirements. However, while supporting CHP and recognizing the increased efficiencies it represents, the Commission concludes that thermal RECs generated by a CHP facility may not be used to satisfy the swine or poultry waste set-aside requirements of G.S. 62-133.8(e) and (f). RECs may satisfy the swine and poultry waste set-aside requirements only if they result from the actual generation of electric power from swine or poultry waste. Nothing in the Commission's rules or its January 20, 2010 Order in Docket No. SP-578, Sub 0 accepting registration of GES's facility specifically addresses this issue or is inconsistent with this conclusion.

Therefore, G.S. 62-133.8(f) would have to be modified pursuant to the off-ramp in order to allow RECs associated with the thermal energy output of a CHP facility which uses poultry waste as a fuel to satisfy the poultry waste set-aside requirement. The Commission is aware of the exceptional nature of the off-ramp provision and the authority delegated to it by the General Assembly in the implementation of the REPS requirements of Senate Bill 3. Although the Commission is not persuaded that its authority under the off-ramp is as limited as that suggested by Bakst, it believes that the off-ramp should be narrowly construed and will exercise its authority under the off-ramp sparingly.

Notwithstanding the strong support for Peregrine's Petition in the comments filed by the parties in this proceeding, the Commission concludes that good cause has not been demonstrated to invoke its discretionary authority pursuant to the off-ramp provision to modify the poultry waste set-aside provision as requested by Peregrine. In this case, the State's electric power suppliers have recently issued a request for proposals (RFP) for poultry waste derived energy to satisfy the set-aside requirement and are negotiating with a number of developers. In their recently filed REPS compliance plans, in Docket No. E-100, Sub 128, the electric power suppliers indicated that they believe the amount of poultry waste energy proposed in response to the RFP will be sufficient to allow them to meet the set-aside requirement. The Commission, therefore, will not modify the poultry waste set-aside provision to broaden the means of compliance in the absence of stronger evidence that compliance with the statute, as written, is not feasible.

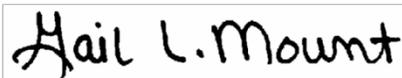
The fact that the electric power suppliers have not yet been able to finalize an agreement with Fibrowatt does not demonstrate that they will be unable to meet the requirements set forth in the statute, as argued by some parties in their comments. The electric power suppliers previously filed and withdrew a request to modify and delay the requirements of the poultry waste set-aside provision, and they may reassert such a request in the future if compliance does not appear possible despite reasonable efforts by the electric power suppliers. Even if the Commission were willing to invoke the off-ramp to modify the poultry waste set-aside provision because of the difficulty in obtaining sufficient energy derived from poultry waste resources, it is premature to do so now given that compliance with the poultry waste set-aside provision by the electric power suppliers is not required until 2012. Alternatively, as suggested by Bakst and NCSEA, Peregrine and its supporters should look to the General Assembly to modify the statute to allow the use of thermal RECs to meet the swine and poultry waste set-aside requirements.

IT IS, THEREFORE, ORDERED that Peregrine's August 10, 2010 Petition requesting that the Commission modify the poultry waste set-aside requirement shall be, and hereby is, denied.

ISSUED BY ORDER OF THE COMMISSION.

This the 8<sup>th</sup> day of October, 2010.

NORTH CAROLINA UTILITIES COMMISSION

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Gail L. Mount, Deputy Clerk

Commissioner Lorinzo L. Joyner did not participate in this decision.

Sw100810.01

**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

DOCKET NO. E-100, SUB 113

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of	)	
Rulemaking Proceeding to Implement	)	ORDER ON JOINT MOTION
Session Law 2007-397	)	FOR DECLARATORY RULING
	)	REGARDING COST RECOVERY

BY THE COMMISSION: A Joint Motion was filed in this docket on September 14, 2010, by Progress Energy Carolinas, Inc. (PEC); Duke Energy Carolinas, LLC (Duke); Dominion North Carolina Power; North Carolina Electric Membership Corporation; GreenCo Solutions, Inc.; North Carolina Eastern Municipal Power Agency; and North Carolina Municipal Power Agency No. 1 (collectively, Movants). Movants seek a declaratory ruling from the Commission that an electric public utility is entitled to recover through G.S. 62-133.2(a1)(6) the total delivered costs of all megawatt-hours purchased from renewable energy facilities and new renewable energy facilities as defined by G.S. 62-133.8, regardless of whether the electric public utility purchases the renewable energy certificate (REC) associated with the renewable energy.

The Commission issued an Order on September 16, 2010, allowing parties an opportunity to file comments and reply comments. Comments have been filed by Movants; Carolina Utility Customers Association, Inc. (CUCA); Green Energy Solutions NV, Inc. (GES); and the Public Staff.

As background, the Commission notes that G.S. 62-133.8 imposes various obligations on electric power suppliers, *i.e.*, electric public utilities, electric membership corporations and municipalities, under the Renewable Energy and Energy Efficiency Portfolio Standard (REPS), G.S. 62-133.8(b) through (f). Two of these obligations are for the purchase of renewable energy generated by the use of swine and poultry waste resources, and these obligations are each stated in terms of an aggregate requirement for the entire State. G.S. 62-133.8(e) and (f). In its Order on Pro Rata Allocation of Aggregate Swine and Poultry Waste Set-aside Requirements and Motion for Clarification issued March 31, 2010, in Docket No. E-100, Sub 113, the Commission approved a pro rata mechanism proposed by the electric power suppliers as a means of determining compliance with the statewide aggregate swine and poultry waste set-aside requirements. The Commission subsequently approved collaborative efforts by most of the electric power suppliers to meet these statewide aggregate requirements. Order on Withdrawal of Joint Motion, Issuance of Joint Request for Proposals, and Allocation of Swine Waste Set-aside Requirement, Docket No. E-100, Sub 113 (Feb. 12, 2010); Order on Joint Motion to Approve Collaborative Activity Regarding Poultry Waste

Set-aside Requirement, Docket No. E-100, Sub 113 (June 25, 2010). Although most of the energy generated from swine waste, for example, will be purchased by PEC pursuant to these approved collaborative efforts because a majority of the swine farms in North Carolina are located in the Eastern part of the State in PEC's assigned service territory, many of the RECs associated with that energy will likely be purchased by Duke and other electric power suppliers in the State to meet their pro rata allocation of the statewide aggregate set-aside requirement.

The Joint Motion presents an issue as to the cost recovery by an electric public utility for such purchases of energy from swine and poultry waste generators (which will also likely be qualifying facilities as defined in the Public Utility Regulatory Policies Act of 1978 (PURPA)) where the REC associated with the energy is being purchased by another North Carolina electric power supplier for REPS compliance. Movants seek a declaratory ruling that a public utility will be able to recover all of the costs incurred for such power purchases through G.S. 62-133.2(a1)(6) of the fuel adjustment clause statute.

The relevant statutory provisions are as follows:

G.S. 62-133.8(h)(4) allows electric power suppliers to recover through an annual REPS rider the incremental costs incurred to comply with the REPS requirements. The incremental costs recoverable through this REPS rider include "all reasonable and prudent costs incurred by an electric power supplier to comply with the requirements of subsections (b), (c), (d), (e), and (f) of this section that are in excess of the electric power supplier's avoided costs other than those costs recovered pursuant to G.S. 62-133.9." G.S. 62-133.8(h)(1)a. The cost of purchasing a REC is an example of such an incremental cost. These costs are subject to the total cost cap of G.S. 62-133.8(h)(3) and the per-account caps of G.S. 62-133.8(h)(4).

G.S. 62-133.2(a) of the fuel adjustment statute provides that the Commission

shall permit an electric public utility that generates electric power by fossil fuel or nuclear fuel to charge an increment or decrement as a rider to its rates for changes in the cost of fuel and fuel-related costs used in providing its North Carolina retail customers with electricity from the cost of fuel and fuel-related costs established in the electric public utility's previous general rate case on the basis of cost per kilowatt-hour.

G.S. 62-133.2(a1) defines the term "cost of fuel and fuel-related costs," and it includes the following subsections:

- (5) The capacity costs associated with all purchases of electric power from qualifying cogeneration facilities and qualifying small power production facilities, as defined in 16 U.S.C. § 796, that are subject to economic dispatch by the electric public utility.

- (6) Except for those costs recovered pursuant to G.S. 62-133.8(h), the total delivered costs of all purchases of power from renewable energy facilities and new renewable energy facilities pursuant to G.S. 62-133.8 or to comply with any federal mandate that is similar to the requirements of subsections (b), (c), (d), (e), and (f) of G.S. 62-133.8.
- (7) The fuel cost component of other purchased power.

### Comments of the Parties

In their initial comments, Movants argue that the fuel adjustment clause statute, G.S. 62-133.2, and the REPS statute, G.S. 62-133.8, together provide for full recovery of costs incurred by an electric public utility to purchase power from renewable energy facilities and new renewable energy facilities. The “incremental costs,” including the cost of RECs, are recovered through the REPS rider; the remaining costs are recovered through the fuel adjustment clause rider. In this case, the RECs associated with the swine and poultry waste energy are being allocated to other electric power suppliers to meet the statewide aggregate set-aside requirement, so none of the costs incurred by the utility are “incremental costs” recoverable pursuant to G.S. 62-133.8. Therefore, argue the Movants, the costs the utility incurs in purchasing the renewable energy are recoverable through the fuel adjustment clause rider pursuant to G.S. 62-133.2.

In its initial comments, the Public Staff states that it supports the pro rata allocation of the statewide poultry and swine waste set-aside and is sympathetic to Movants’ concerns, but that it opposes the request on the grounds that G.S. 62-133.2(a1)(6) does not authorize recovery through the fuel adjustment clause statute of the total delivered costs of a utility’s purchases of energy from renewable energy facilities and new renewable energy facilities when the utility does not purchase the associated REC. The Public Staff interprets the phrase “purchases of power from renewable energy facilities and new renewable energy facilities pursuant to G.S. 62-133.8” as limited to purchases to meet the purchaser’s own REPS obligation, i.e., purchases bundled with the associated REC.

While the megawatt-hours purchased may be used to serve the electric public utility’s customers, the total delivered costs of those purchases would not have been incurred by the electric public utility pursuant to G.S. 62-133.8 absent the REPS obligations of other electric power suppliers. These costs might have been incurred by the electric public utility pursuant to its PURPA obligations, but in that case, their recovery would be governed by subsections (5) and (7) of G.S. 62-133.2(a1), not subsection (6). [Emphasis in original.]

Alternatively, states the Public Staff, if any relief is allowed, that relief should be limited to only those purchases made as part of a collaborative effort by electric power suppliers to meet the statewide aggregate swine and poultry waste set-aside requirements. The Public Staff suggests that there are alternative ways to deal with

Movants' concerns – such as wheeling the energy to the suppliers that purchase the RECs or a “virtual pooling mechanism” – that would both allow cost recovery and comply with the General Statutes.

CUCA also opposes the request. CUCA states that it has consistently argued that the fuel adjustment clause statute should be strictly limited, and that this request would set a bad precedent for expanding the scope of cost recovery through fuel adjustment clause proceedings. CUCA states that the motion is premature and that it would be better for the General Assembly to clarify the matter.

In its comments, GES states that it has submitted proposals to each of the Movants, wherein it proposes to sell to these utilities electricity at their respective avoided costs, which the utilities are permitted to recover pursuant to G.S. 62-133.2(a1)(6). Separately, GES will be offering for sale, at the prevailing market rate, the RECs associated with the generation of renewable energy that is produced at GES's facilities.

In their reply comments, Movants reiterate that, since a utility purchasing energy without the associated RECs cannot recover any of its costs through the REPS rider, “all of the purchased power costs are to be recovered through the fuel and fuel-related costs rider.” They argue that the Public Staff fails to appreciate the unique situation posed by the REPS statewide aggregate swine and poultry waste set-aside obligations. Absent the approved pro rata allocation mechanism, all of the renewable energy purchased under the statewide aggregate obligation would have been purchased pursuant to G.S. 62-133.8. “The fact that a simple administrative measure was necessary to enable an equitable division of the statewide aggregate obligation should not result in either an increase in costs to North Carolina customers or an unfair imposition of potentially stranded costs to any one utility.” Movants argue that the General Assembly's goal was to allow recovery of all costs that suppliers incur in complying with the REPS standards and that the Public Staff's position would leave some costs “trapped and unrecovered.” Movants state that the alternatives suggested by the Public Staff present “knotty questions and strained interpretations” that can be avoided by allowing the declaratory ruling as requested.

In its reply comments, the Public Staff argues that Movants' interpretation of G.S. 62-133.2(a1)(6) is not only contrary to the purpose and intent of the statute, but is contrary to the plain language of the statute itself. The Public Staff reasons as follows:

The phrase “pursuant to” – a complex preposition meaning “under” or “in accordance with” [footnote omitted] – when used with G.S. 62-133.8, clearly modifies “all purchases of electric power from renewable energy facilities and new renewable energy facilities,” not the facilities themselves. .... Similarly, the phrase “to comply with any federal mandate that is similar to the requirements of subsections (b), (c), (d), (e), and (f) of G.S. 62-133.8,” which is not quoted by Movants, also modifies “all

purchases of electric power from renewable energy facilities and new renewable energy facilities.”

Thus, the Public Staff argues that the General Assembly intended for only the costs of bundled power purchased by a public utility to meet its own REPS obligations under either G.S. 62-133.8 or a similar federal mandate to be recoverable through G.S. 62-133.2(a1)(6).

### Discussion and Conclusions

After careful consideration, the Commission finds good cause to grant, in part, the relief requested in the Joint Motion. To the extent an electric public utility purchases power from a swine or poultry waste-fueled renewable energy facility or new renewable energy facility to comply with the requirements of Senate Bill 3, as interpreted and implemented by Commission order, without purchasing the RECs associated with such power purchases, it may recover the costs of such purchases under G.S. 62-133.2(a1)(6) if such RECs are acquired by another electric power supplier for REPS compliance. Neither the amended fuel adjustment clause statute nor G.S. 62-133.8 contains an express requirement that the purchases of power and associated RECs be bundled as a prerequisite for cost recovery through G.S. 62-133.2(a1)(6), and for purposes of this case the Commission declines to impose one. The Commission’s ruling, however, is limited only to the narrow facts of Movants’ specific request addressing purchases of power from swine and poultry waste-fueled renewable energy facilities or new renewable energy facilities to comply with the set-aside requirements at issue.

Since enactment of the REPS statute, the Commission has repeatedly been presented with issues regarding the statewide aggregate swine and poultry waste set aside obligations. In each instance, the Commission has interpreted the statute consistent with the legislature’s intent that North Carolina electric power suppliers be required to collectively purchase certain amounts of energy primarily generated from local swine and poultry waste resources.

So that an electric public utility will not be penalized by the REPS requirements, the General Assembly amended the fuel adjustment clause statute to allow full recovery through the fuel adjustment clause and REPS riders of all costs reasonably and prudently incurred to comply with the REPS requirements. Subsection (a1)(6) of the amended fuel adjustment clause statute specifically provides that, “[e]xcept for those costs recovered pursuant to G.S. 62-133.8(h), the total delivered costs of all purchases of power from renewable energy facilities and new renewable energy facilities pursuant to G.S. 62-133.8...” The Commission determines that the second “pursuant to” phrase is synonymous with the phrase “to comply with” found thereafter in the same subsection.

In implementing Senate Bill 3 and the statewide aggregate requirement of the swine and poultry waste set-asides, the Commission has approved pro rata

requirements that may result in PEC or another electric public utility purchasing power generated from swine and poultry waste to comply with the statewide aggregate set-aside requirements that is not bundled with the RECs constituting the associated environmental attributes. To comply with the statutes as interpreted and implemented by the Commission, another electric power supplier will purchase these unbundled swine and poultry waste RECs for REPS compliance. As the electric public utility will be purchasing power from the poultry and swine waste-fueled renewable energy facilities or new renewable energy facilities to comply with the statewide aggregate swine and poultry waste set-aside requirements of G.S. 62-133.8, as interpreted and implemented by Commission order, its purchases satisfy the requirement of G.S. 62-133.2(a1)(6) that they be made to comply with G.S. 62-133.8. The Commission, therefore, determines that, notwithstanding the fact that REC costs and ownership are apportioned among the electric power suppliers on a pro rata basis to meet the REPS statewide aggregate swine and poultry waste set-aside requirements, all of the energy associated with such RECs purchased is purchased “pursuant to G.S. 62-133.8” as provided in the fuel adjustment clause statute, G.S. 62-133.2(a1)(6).

The Commission takes judicial notice that North Carolina is the only state in the country that has adopted swine and poultry waste resource set-aside requirements as part of its renewable portfolio standard. Even more unique is the adoption of statewide aggregate standards for compliance with these set-aside requirements. But for these particular set-aside requirements, it is likely that few, if any, swine and poultry waste-to-energy generating facilities would be constructed in North Carolina to meet the general REPS requirement, and the issue raised in the Joint Motion would be moot because there would be no purchases from such facilities by this State’s electric public utilities unbundled from the associated RECs. Therefore, to further efforts of the State’s electric power suppliers to comply with these unique set-aside requirements, the Commission concludes that all purchases of electricity from swine and poultry waste-fueled electric generating facilities by this State’s electric public utilities, whether bundled with or unbundled from the associated RECs, are made in order to comply with the provisions of G.S. 62-133.8 as long as the associated RECs are purchased by a North Carolina electric power supplier to comply with the REPS statewide aggregate swine and poultry waste set-aside requirements.

For the reasons set forth above, the Commission, therefore, concludes that the request for a declaratory ruling should be granted, in part, as follows: with regard to purchases of power by an electric public utility from renewable energy facilities or new renewable energy facilities where the electric public utility is not also purchasing the associated RECs, except for those costs recovered pursuant to G.S. 62-133.8, an electric public utility is entitled to recover through G.S. 62-133.2(a1)(6) the total delivered costs of all purchases of power from renewable energy facilities or new renewable energy facilities that are made to comply with the REPS statewide aggregate swine and poultry waste set-aside requirements of G.S. 62-133.8(e) and (f), as interpreted and implemented by Commission order, where the associated RECs are purchased by another North Carolina electric power supplier to comply with the REPS statewide aggregate swine and poultry waste set-aside requirements.

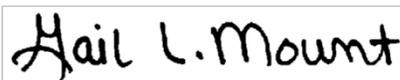
The Commission notes that Movants' specific request is limited to purchases of power made to meet the poultry and swine waste set-aside requirements as interpreted by prior Commission orders approving the pro rata mechanism. The Commission further notes, however, that, somewhat inconsistently, Movants' prayer for relief is not specifically limited to purchases of power made to meet the poultry and swine waste set-aside requirements, but is so broadly worded that it would also apply to other purchases of energy from renewable energy facilities or new renewable energy facilities. For example, the relief requested in the Joint Motion could apply to the purchase of renewable energy generated by a solar photovoltaic facility where the RECs were unbundled from the energy and sold to NC GreenPower or to another entity not subject to the North Carolina REPS requirement. The Commission does not believe that the amended fuel adjustment clause statute may be interpreted so broadly as to allow recovery through the fuel adjustment clause rider of the cost of all energy purchased from renewable energy facilities or new renewable energy facilities, "regardless of whether the electric public utility purchases the [REC] associated with the purchase of the renewable [energy]," as requested in Movants' prayer for relief. The Commission's Order herein, therefore, is strictly limited as set forth above to purchases of power from renewable energy facilities or new renewable energy facilities that are made to comply with the REPS statewide aggregate swine and poultry waste set-aside requirements of G.S. 62-133.8(e) and (f) where the associated RECs are purchased by another North Carolina electric power supplier to comply with the REPS statewide aggregate swine and poultry waste set-aside requirements.

IT IS, THEREFORE, SO ORDERED.

ISSUED BY ORDER OF THE COMMISSION.

This the 23<sup>rd</sup> day of November, 2010.

NORTH CAROLINA UTILITIES COMMISSION

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Gail L. Mount, Deputy Clerk

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**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

DOCKET NO. E-100, SUB 113  
DOCKET NO. E-100, SUB 121

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-100, SUB 113	)	
	)	
In the Matter of	)	
Rulemaking Proceeding to Implement	)	
Session Law 2007-397	)	
	)	ORDER AMENDING RULES R8-64
DOCKET NO. E-100, SUB 121	)	THROUGH R8-69 AND APPROVING
	)	FINAL OPERATING PROCEDURES
In the Matter of	)	FOR NC-RETS
Implementing a Tracking System for	)	
Renewable Energy Certificates Pursuant	)	
to Session Law 2007-397	)	

BY THE COMMISSION: By its Orders issued on September 4, 2009, and on February 4, 2010, the Commission invited interested parties to propose amendments to Commission Rules R8-64 through R8-69 for the purpose of streamlining the administration of Session Law 2007-397 (Senate Bill 3) and the State’s Renewable Energy and Energy Efficiency Portfolio Standard (REPS).

On January 27, 2010, the Commission issued an Order in Docket No. E-100, Subs 113 and 121 requesting comments on proposed amendments to Rule R8-67 regarding the participation of electric power suppliers and renewable energy facilities<sup>1</sup> in the North Carolina Renewable Energy Tracking System (NC-RETS). The Commission proposed amendments to Rule R8-67, the rule that addresses implementation of REPS. Because the proposed rule changes to Rule R8-67 overlap with the parties’ proposed changes to streamline the administration of Senate Bill 3, the Commission is addressing both rulemaking efforts in this Order.

On July 1, 2010, the Commission issued an Order Adopting Interim Operating Procedures for REC Tracking System in Docket No. E-100, Sub 121, in which it adopted, on an interim basis, procedures detailing the circumstances under which the NC-RETS Administrator is authorized to issue renewable energy certificates (RECs)

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<sup>1</sup> Throughout this Order, the phrase “renewable energy facility(ies)” includes “new renewable energy facilities.”

and energy efficiency certificates (EECs). The Interim Operating Procedures were developed within the NC-RETS Stakeholder Group. The Commission's Order stated:

Proposed rule changes regarding implementation of Session Law 2007-397, including additional new rules addressing the renewable energy certificate (REC) tracking system, are pending before the Commission in this Docket as well as in Docket No. E-100, Sub 113. The Commission anticipates issuing an order regarding those rules shortly and allowing parties to comment as to whether there are any conflicts or inconsistencies between the proposed revised rules and the Interim Operating Procedures for NC-RETS. Following receipt of comments, the Commission anticipates issuing final Operating Procedures for NC-RETS.

On August 3, 2010, the Commission issued an Order that (1) made preliminary decisions regarding the parties' proposed amendments to Rules R8-64 through R8-69; (2) proposed additional amendments to those Rules; (3) invited parties to comment on the proposed amendments and the NC-RETS Interim Operating Procedures; and (4) established that, beginning January 1, 2011, renewable energy facilities that participate in NC-RETS are only eligible for historic REC issuances for energy production going back two years.

On August 11, 2010, the Commission established September 20, 2010, as the deadline for filing comments. In its Order, the Commission affirmed that it

has already made preliminary decisions regarding numerous issues raised by the parties in their initial and reply comments and their suggested revisions. The Commission's intent in this further round of comments is to seek comment on the specific amendments proposed to implement these decisions, on issues addressed by the Commission but not raised originally by the parties, and on potential conflicts with the NC-RETS Interim Operating Procedures.

On September 20, 2010, the Commission issued an Order establishing October 4, 2010, as the new deadline for filing comments.

On October 4, 2010, comments in response to the Commission's August 3, 2010 Order were filed jointly by Virginia Electric and Power Company, d/b/a Dominion North Carolina Power (Dominion), Duke Energy Carolinas, LLC (Duke), GreenCo Solutions, Inc. (GreenCo), and Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc. (PEC), (the Utilities); jointly by Environmental Defense Fund, Southern Alliance for Clean Energy, and the Southern Environmental Law Center (the Environmental Intervenors); and jointly by Electricities of North Carolina, Inc. (Electricities), North Carolina Eastern Municipal Power Agency (NCEMPA), and North Carolina Municipal Power Agency Number 1 (NCMPA), (the Municipal Utilities). In addition, Duke submitted comments on behalf of itself, as did the Public Staff.

On December 10, 2010, the Commission issued an Order extending until June 1, 2011, the deadline after which renewable energy facilities that participate in NC-RETS are only eligible for historic REC issuances for energy production going back two years.

Attached to this Order are: (1) Appendix A, the final revised Rules R8-64 through 69 with underlining and strikethroughs to highlight changes the Commission is making to the proposed rules it issued on August 3, 2010<sup>2</sup>; (2) Appendix B, the final revised Rules R8-64 through 69 without underlining and strikethroughs; (3) Appendix C, a form to assist facility owners in filing their renewable energy facility registrations pursuant to Rule R8-66; (4) Appendix D, the final NC-RETS Operating Procedures with underlining and strikethroughs to highlight changes the Commission is making to the Interim Operating Procedures that were issued by the Commission on July 1, 2010; and (5) Appendix E, the final NC-RETS Operating Procedures without underlining and strikethroughs. These rules and procedures are effective as of the date of this Order. The balance of this Order will discuss the issues raised by parties and the Commission's decisions relative to those issues.

### **Amendments to Rule R8-64. Application for Certificate of Public Convenience and Necessity by Qualifying Cogenerator or Small Power Producer; Progress Reports**

#### **Issue 1: Whether Renewable Energy Facilities Should Have An On-Going Obligation To Inform The Commission Regarding REC Sales**

The Public Staff noted that the Commission proposed to amend Rule R8-64(b)(1)(x) to require both generators that apply for Certificates of Public Convenience and Necessity (CPCNs) and those that file reports of proposed construction pursuant to G.S. 62-110.1(g) to include in their submittals a general plan for the disposition of RECs created as a result of their generation, but that only CPCN holders must subsequently inform the Commission of any significant changes to the information they file in their submittal. The Public Staff suggested that generators that are exempt from the CPCN filing requirements should also be required to update the Commission of any material changes to their plans for the disposition of RECs or other environmental attributes.

The Commission disagrees. As explained in its August 3, 2010 Order, the Commission is requiring generators to initially include in their CPCN applications (or reports of proposed construction) their general plan, if known at the time, for the disposition of RECs in order to assist facility owners and utilities in identifying those facilities that also need to register as "renewable energy facilities" under Rule R8-66. The Commission does not consider a change in plans relative to selling RECs to be a "significant change" that needs to be filed with the Commission on an on-going basis. The Commission believes it would be burdensome to require all renewable energy facilities located in North Carolina to update the Commission when their plans for

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<sup>2</sup> Throughout this Order, deletions from the August 3, 2010 Proposed Rules are shown by strikethrough, and additions are shown by underlining.

disposing of RECs change. The Commission will instead rely on NC-RETS to track REC issuance and REC transfers. In the event the data in NC-RETS is challenged, the Public Staff may exercise its right to audit the records of any renewable energy facility as provided for in the Commission's orders approving the facility registrations.

The Utilities opposed the Commission's revision to R8-64(b)(1)(x), arguing that the provision would require a generator to divulge confidential market information regarding the intended recipient of RECs or environmental attributes. They argued that other associated environmental attributes have no relevance to the registration of a renewable energy facility. The Utilities proposed revisions to clarify that the applicant would simply need to state whether they intend to produce RECs. The Commission did not intend to require applicants to divulge an intended REC recipient, and the Commission agrees that information regarding a facility's associated environmental attributes is not necessary. The Commission will, therefore, revise proposed Rule R8-64(b)(1)(x) as shown below and in Appendix A.

(x) The applicant's general plan for sale of the electricity to be generated, including the utility to which the applicant plans to sell the electricity; any provisions for wheeling of the electricity; arrangements for firm, non-firm or emergency generation; the service life of the project; and the applicant's general plan for the disposition of renewable energy certificates or other environmental attributes whether the applicant intends to produce renewable energy certificates that are eligible for compliance with the State's Renewable Energy and Energy Efficiency Portfolio Standard; and

## Issue 2: Notification Of Significant Changes

The Utilities proposed amending Rule R8-64(d)(3), which addresses the ongoing obligations of a CPCN recipient, such that the certificate holder would be required to notify "both the Commission and the utility involved" of "significant changes" prospectively, even after the certified facility is built. The Utilities asserted this was needed "due to the relevance of these items on an entity's renewable energy status." The Commission believes this need for notification is already addressed by new Rule R8-66(h), which provides that an owner of a renewable energy facility shall notify the Commission and the tracking system that issues its RECs within 15 days of "any material change in status, including ownership change, fuel change, or permit issuance or revocation." This requirement should ensure that the RECs issued for the facility accurately reflect its renewable energy status. Therefore, the Commission will decline to adopt the Utilities' proposed amendment to Rule R8-64(d)(3).

## **Amendments to Rule R8-66. Registration of Renewable Energy Facilities; Annual Reporting Requirements**

### **Issue 3: Whether Small Generators That Participate In Utility Programs Should Be Subject To Rule R8-66**

The Public Staff noted that the issue of whether small generators participating in utility programs should be subject to certain requirements of Rule R8-66 was pending before the Commission in PEC's Residential Service Experimental SunSense Solar Rider, Docket No. E-2, Sub 979. On November 15, 2010, the Commission issued an Order approving PEC's request to waive some of the registration and reporting requirements of Rule R8-66 for residential customers who participate in this rider. Since no party proposed rule revisions to waive these requirements for all residential customers, the Commission will not address that issue at this time.

### **Issue 4: Whether Renewable Energy Facilities Must Inform The Commission When They Join Or Change REC Tracking Systems**

The Public Staff recommended that a new subsection be added to Rule R8-66(b)(1) that would require the owner of a renewable energy facility to advise the Commission when it has joined a tracking system (other than NC-RETS), and to advise the Commission any time the status of its tracking system participation changes. The Commission will decline to adopt the Public Staff's recommendation in this regard in order to minimize the on-going filing requirements for renewable energy facilities. In order for an electric power supplier to claim credit for a REC for REPS compliance, the REC must first be created in NC-RETS or another REC tracking system. Also, it is the Commission's understanding that each REC tracking system in the United States maintains rigorous records as to when generators begin and stop participation and require that all of a generator's RECs from a given time period be created in a single tracking system. Should REC tracking system records prove inadequate, the Public Staff may exercise its right to audit the records of any renewable energy facility as provided for in the Commission's orders approving their registrations.

### **Issue 5: Registration Form To Emphasize Map Requirement**

The Public Staff requested that the application form for registering renewable energy facilities give more emphasis to the requirement to provide a map. The Commission agrees that this change will be helpful, and will, therefore, make the requirement to provide a map more explicit on the form for registering a renewable energy facility, as shown in Appendix C.

### **Issue 6: Thermal Facilities To Include Information Regarding Method Of Measuring Or Estimating Energy Production**

The Public Staff recommended that Rule R8-66(b)(1) be amended to require facility owners to include with their registrations "the method used to determine the

BTUs generated if the facility creates thermal RECs.” The Commission agrees that requiring this information as part of the registration process will help the Public Staff ascertain whether the applicant’s intended methodology will produce accurate results. Therefore, the Commission will adopt the requirement, as shown in Appendix A.

#### Issue 7: Failure To Recertify

The Public Staff noted that it is not clear from the amended Rule R8-66(f) whether the failure of a renewable energy facility to annually recertify would automatically result in revocation of the facility’s registration as a renewable energy facility. The Public Staff expressed concern about the lack of a centralized means of tracking facilities that fail to recertify. The Commission notes that NC-RETS will require participating facilities to recertify by April 1 each year. Failure to do so will result in the account holder being unable to access their accounts in NC-RETS.<sup>3</sup> For owners of facilities that participate in a tracking system other than NC-RETS, annual recertification will remain a paper process. The Commission will publish on its web site the renewable energy facilities that have failed to timely recertify. Such facilities will not be able to transfer RECs into NC-RETS until their recertifications have been completed. Parties, including the Public Staff, who believe that a registration should be revoked, may petition the Commission.

#### Issue 8: Recovery Of Net Lost Revenues

The Environmental Intervenors stated that it would be helpful for the Commission to provide clear direction regarding the explicit limitations on the recovery of net lost revenues set forth in its June 15, 2009 Order Approving Agreement and Stipulation of Settlement, Subject to Certain Commission-Required Modifications, in PEC’s Docket No. E-2, Sub 931, and its February 9, 2010 Order Approving Agreement and Joint Stipulation of Settlement Subject to Certain Commission-Required Modifications and Decisions on Contested Issues in Duke’s Docket No. E-7, Sub 831. The Environmental Intervenors also stated that the Commission should consider a process to further expedite review of non-controversial demand-side management (DSM) and energy efficiency (EE) program applications. The Environmental Intervenors did not suggest specific rule revisions relative to either issue. In addition, both of these issues are new issues in the context of this rulemaking proceeding. Therefore, the Commission will decline to adopt the Environmental Intervenors’ proposals at this time.

#### Issue 9: Form For Registering A Renewable Energy Facility

The Utilities suggested that the form entitled “Application to Register a Renewable Energy Facility or New Renewable Energy Facility” be revised to reflect that it could be used for either a report of proposed construction under Rule R8-65 or a registration request under Rule R8-66. The Utilities stated that the required information is identical, and hence the same form should suffice for both kinds of applications. The

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<sup>3</sup> See pages 35-36 of the NC-RETS Operating Procedures, Appendix E.

Commission has reviewed the filing requirements and finds that they are not, in fact, identical. For example, a report of proposed construction must include information relative to the projected cost of the facility, Rule R8-64(b)(viii), and a description of the facility's buildings, structures and equipment, Rule R8-64(b)(vi). Neither of these requirements applies to an application to register a renewable energy facility. In addition, there will be owners of facilities who are required to file a report of proposed construction but who do not intend to register the facility, and owners of out-of-state facilities who are not required to file a report of proposed construction but are simply registering the facility. The procedures for processing reports of proposed construction and registration statements differ, and it is important that owners of such facilities clearly identify which, or both, they are requesting. Therefore, the Commission will decline to adopt the Utilities' proposal.

#### Issue 10: Attestations Apply To Historic REC Production

The Utilities stated that the registration process does not make clear that the facility owner is attesting that the facility complied with all requirements for the historical period that it earned RECs. Rather, the form only applies to the immediate timeframe (and to future years via the recertification process). To ensure that the RECs produced in the past by a recently registered facility are eligible for compliance, the Utilities requested that Rule R8-66(b)(6) and the registration form be revised so that the owner of a renewable energy facility must attest that the information in the form "is true and correct for all years that the facility has earned RECs for compliance with G.S. 62-133.8." The Commission finds this to be a reasonable revision that will help maintain the credibility of RECs used for compliance. Therefore, the Commission will adopt the revision to Rule R8-66(b)(6) as shown in Appendix A and the registration form as shown in Appendix C.

#### Issue 11: Owners Of Renewable Energy Facilities To Inform The Commission And The Tracking System Of Material Changes

The Utilities noted the new requirement in Rule R8-66(h) for renewable energy facility owners to notify the Commission and the tracking system that issues the facility's RECs when material changes, such as a change in facility ownership, occur. The Utilities stated that facilities registered with the Commission "may not be simultaneously participating in a REC tracking system, and that one or both may require notification." The Utilities also noted that the 15-day requirement in the rule appears to conflict with a similar 30-day requirement in Section 4.4 of the NC-RETS Interim Operating Procedures. The Utilities proposed revisions to Rule R8-66(h) that appear to relieve a facility from communicating such changes to its REC registry if it participates in one other than NC-RETS.

The Commission notes that all of its orders approving registration of renewable energy facilities and new renewable energy facilities have included the requirement that each facility participate in a REC tracking system. In order to ensure that RECs are issued to the rightful owner, a facility's tracking system must be aware of facility

ownership changes. In order to ensure RECs are issued with accurate fuel source identifiers, a facility's tracking system must be aware of fuel changes. In order for the Commission to "ensure that the owner and operator of each renewable energy facility that delivers electric power to an electric power supplier is in substantial compliance with all federal and state laws, regulations and rules for the protection of the environment and conservation of natural resources," G.S. 62-133.8(i)(5), the Commission must be informed if a registered facility has a permit issued or revoked. Therefore, it is consistent for the rules to require registered facilities to notify both entities, the Commission and their REC tracking system, of material changes. The Commission will, therefore, decline to adopt the changes proposed by the Utilities. However, the Commission will revise the NC-RETS Operating Procedures to be consistent with Rule R8-66(h) by requiring notifications of material changes to be made to NC-RETS within 15 days.

### **Amendments to Rule R8-67. Renewable Energy and Energy Efficiency Portfolio Standard (REPS)**

#### **Issue 12: Energy Information Administration Customer Account Data Acceptable**

The Utilities recommended that proposed amendments to Rule R8-67(a)(4) be reversed so as to retain an electric power supplier's ability to use the customer account data it reports to the Energy Information Administration for REPS purposes. The Commission believes this is a reasonable recommendation, and will therefore amend Rule R8-67(a)(4) as shown in Appendix A.

#### **Issue 13: Definition Of Utility Compliance Aggregator**

The Utilities suggested that the definition of "utility compliance aggregator" in Rule R8-67(a)(5) be amended to clarify that the role of a utility compliance aggregator is not limited to the two functions listed in the definition. The Commission finds this suggestion to be reasonable and will, therefore, amend the proposed definition as follows and as shown in Appendix A:

"Utility compliance aggregator" is an organization that assists an electric power supplier in demonstrating its compliance with REPS. Such demonstration may include, among other things, filing REPS compliance plans or reports and participating in NC-RETS on behalf of the electric power supplier or a group of electric power suppliers.

#### **Issue 14: Reporting Of Annual Incremental Costs Incurred In REPS Compliance Reports**

The Utilities suggested revisions to Rule R8-67(c)(1)(vi) so that electric power suppliers need only include annual "incremental costs incurred" in their REPS compliance reports on an exception basis, that is, only "to the extent that an electric power supplier does not meet the MWh [REC and EEC] compliance requirements. In

this case, it is important to document that cost caps were met in order to be deemed compliant.” The Commission disagrees. One of the requirements of Senate Bill 3 is that the electric power supplier not incur and recover from customers incremental costs in excess of the per-account costs caps. Because the Commission does not regulate the rates for all electric power suppliers, the Commission needs this information in order to monitor compliance. Therefore, this information must be provided. It should be no burden for an electric public utility to provide this information since they will be providing substantially similar data to support their cost recovery riders. While the Commission will decline to adopt the specific language suggested by the Utilities, it will instead adopt the language below in order to clarify that the amount of incremental REPS spending during the compliance calendar year will be the measure for whether an electric power supplier is “deemed compliant” pursuant to G.S. 62-133.8(h)(3). Therefore, the Commission will revise proposed Rule R8-67(c)(1) as shown below and in Appendix A:

(iv) the actual total and incremental costs incurred during the calendar year to comply with G.S. 62-133.8(b), (c), (d), (e) and (f);

(v) a comparison of the actual ~~compliance~~ incremental costs incurred during the calendar year to the per-account annual charges (in G.S. 62-133.8(g)(4)) applied to its total number of customer accounts as of December 31 of the previous calendar year to the annual cost caps;

(vi) the status of compliance with the requirements of G.S. 62-133.8(b), (c), (d), (e) and (f). ~~To the extent that compliance with the requirements of G.S. 62-133.8(b), (c), (d), (e) and (f) has not been achieved, the electric power supplier shall provide a comparison of the actual incremental costs incurred during the calendar year to the per-account annual charges (in G.S. 62-133.8(h)(4)) applied to its total number of customer accounts as of December 31 of the previous calendar year;~~

#### Issue 15: Whether To Align Compliance Time Period With Cost Incurrence Time Period, And Whether REC Costs May Be Rolled Forward For Cost Recovery

The Utilities stated that throughout Rule R8-67 compliance measurement and recovery periods are referenced by various and inconsistent terms: “calendar year,” “annual,” and “cost recovery period.” They stated as follows:

It is not clear how each of these items interacts with regard to each other. ... By the term annual, one could infer either calendar year or cost recovery period. ... Since the ability to recover [costs] from customers is based on the cost recovery period, then it would seem appropriate for cost comparisons to the cap be for the same cost recovery period versus a calendar year. If it is not, then the electric suppliers would theoretically be forced to comply with two cost caps, one for the compliance report on an annual basis, and one for the cost recovery period to assess the amounts collected from customers. ... it is only logical for the compliance period

and the cost recovery period to coincide from a timing perspective. This change would eliminate confusion regarding the reconciliation of a calendar year compliance requirement and a cost cap related to compliance costs measured over a different period.

The Utilities proposed extensive revisions to Rule R8-67(c), the portion of the rules dealing with the REPS compliance report, in order to apply the cost cap against a compliance time period and a cost recovery time period that are consistent.

The Commission agrees with the Utilities that Senate Bill 3 applies the cost caps to multiple circumstances, and that those applications of the cost cap do not necessarily cover the same time period, nor do they measure the same activities. First, G.S. 62-133.8(h)(3) uses the cost cap to limit the incremental costs that may be incurred and then recovered by an electric power supplier:

...the total annual incremental cost to be incurred by an electric power supplier and recovered from the electric power supplier's retail customers shall not exceed an amount equal to the per-account annual charges set out in subdivision (4) of this subsection applied to the electric power supplier's total number of customer accounts determined as of 31 December of the previous calendar year. [Emphasis added.]

Similarly, G.S. 62-133.8(h)(4) applies the cost cap to limit the amount of an electric power supplier's annual cost recovery rider:

An electric power supplier shall be allowed to recover the incremental costs incurred to comply with the [REPS] requirements ... through an annual rider not to exceed the following per-account annual charges ....

Second, G.S. 62-133.8(h)(3) applies the cost cap to determine REPS compliance:

An electric power supplier shall be conclusively deemed to be in compliance with the [REPS] requirements ... if the electric power supplier's total annual incremental costs incurred equals an amount equal to the per-account annual charges set out in subdivision (4) of this subsection applied to the electric power supplier's total number of customer accounts determined as of 31 December of the previous calendar year.

Throughout G.S. 62-133.8, it is clear that the General Assembly intended that REPS compliance be based on a calendar year period. In stating the general REPS obligations for the electric power suppliers in subsections (b) and (c), and the set-aside requirements in subsections (d), (e) and (f), the REPS requirements were set forth on a calendar year basis. In subsection (h), the term "incremental costs" is defined primarily as the additional costs incurred for REPS compliance, and should be considered to be the incremental costs incurred during a calendar year for REPS compliance. Thus, the

Commission concludes that the use of the word “annual” in G.S. 62-133.8(h)(3) should be interpreted to mean “calendar year” consistent with the General Assembly’s intent that REPS compliance and incremental costs should be determined on a calendar year basis.

If there were no risk that the electric power suppliers would meet the REPS percentage requirements without encroaching on the cost cap, this issue would be purely academic; the cost cap would never come into play and the time periods over which it is applied would be irrelevant. However, as there is the risk that an electric power supplier might reach the cost cap at some time in the future, further analysis of the statutory language and clarification of the Commission’s interpretation is necessary.

In adopting rules to implement Senate Bill 3, the Commission recognized that it is unlikely, if not impossible, for an electric power supplier to limit its spending on power generated from renewable energy resources during a calendar year when at least a portion of its requirements is being met by purchases from facilities that rely on intermittent resources, such as the sun and wind. The General Assembly made allowances for this variability by allowing electric power suppliers to carry forward to the next calendar year RECs purchased in a calendar year in excess of those needed for that year’s REPS compliance. For example, during calendar year 2008 there was no REPS obligation, and at the end of that year, all RECs that had been purchased were carried forward to 2009. Likewise, during calendar year 2009, during which there was also no REPS obligation, all RECs previously carried forward from 2008 as well as any purchased during 2009 were carried forward to 2010. Thus, since there was no REPS requirement in 2009, all RECs owned at the end of that calendar year were carried forward and available to be applied toward the REPS requirement in 2010.

Rule R8-67(e)(10), as originally adopted, was intended to allow an electric public utility to defer cost recovery for any incremental costs in excess of the cost cap and to carry forward the associated RECs. However, cost recovery could not be deferred for any RECs that were retired for compliance with the prior year’s REPS requirement. For example, if a utility with an incremental cost cap of \$1 million was delivered, pursuant to contract, RECs costing in excess of \$1 million, it could claim compliance pursuant to subsection (h)(3) with regard to the incremental costs incurred up to \$1 million. The RECs associated with the incremental costs in excess of \$1 million could be carried forward to the next calendar year and recovery of those incremental costs would be deferred. In fact, an electric public utility would be allowed to carry forward such RECs indefinitely as long as it continued to defer recovery of the associated incremental costs.

The suggested revisions by the Utilities attempt to align the timeframes so that the annual charges to customers and the annual costs incurred toward REPS compliance are measured during the same timeframe. However, the Commission believes it is the clear intent of Senate Bill 3 to have essentially two cost caps: one to limit REPS charges to customers, and one to create an alternate path toward REPS compliance via a spending cap. Therefore, the Commission will decline to adopt the revisions suggested by the Utilities for Rule R8-67(c). However, the Commission

acknowledges that there is some confusion because cost-recovery periods for electric public utilities do not perfectly align with calendar years. The Commission will, therefore, revise proposed Rule R8-67(e)(10) as shown below and in Appendix A such that the annual cost caps for charges to customers specified in G.S. 62-133.8(h)(4) apply to customer charges for any “12-month recovery period.”

The Utilities requested that the Commission clarify the intent of Rule R8-67(e)(10) relative to cost recovery. They noted that cost recovery filings routinely include a forecast period allowing recovery of future RECs that in most cases have not been produced as of the time of the cost recovery proceeding. Additionally, under the current rule, it “could be construed that the cost of a REC cannot be recovered after the REC has been used for compliance....” The Utilities also stated that, during NC-RETS stakeholder meetings, differences in interpretation of G.S. 62-133.8(h)(3) had surfaced, and requested that the Commission clarify that REPS costs may be “carried forward to a subsequent year subject to the application of the cost caps.”

The Utilities are correct that Rule R8-67(e)(10) is confusing and appears to be at cross-purposes with the use of an experience modification factor (EMF) in REPS rider proceedings. Additionally, the Utilities are correct that the Commission intended that costs for RECs that are being banked for compliance in a future year may be rolled forward into another cost recovery year if recovery in the year in which the costs are incurred would cause the electric power supplier to exceed its cost cap. Therefore, the Commission will clarify Rule R8-67(e)(10) as shown below and in Appendix A:

(10) Incremental incurred costs incurred during a calendar year toward a current or future year’s REPS obligation may be recovered by an electric public utility in any 12-month recovery period up to and including the 12-month recovery period in which the RECs associated with any incremental costs are retired toward the prior year’s REPS obligation, after a renewable energy certificate is acquired or obtained until the renewable energy certificate is used to comply with G.S. 62-133.8(b), (d), (e) and (f) as long as the electric public utility’s charges to total annual incremental costs recovered from customers in that year do not exceed, in any 12-month period, the per-account annual charges provided in G.S. 62-133.8(h)(4). ~~Incremental costs that exceed the per-account annual charges provided in G.S. 62-133.8(h)(4) in the year in which a renewable energy certificate is used to comply with G.S. 62-133.8(b), (d), (e), and (f) may not be recovered.~~ A renewable energy certificate must be used for compliance and retired within seven years of the year in which the electric public utility recovers the related costs from customers. An electric public utility shall refund to customers with interest the costs for renewable energy certificates that are not used for compliance within seven years.

## Issue 16: Data Retention

The Utilities recommended that data from electric meters installed on the customer's side of a utility meter, or customer-measured or metered thermal data, be subject to the same 10-year record retention requirements as the electric generation data from meters read by electric power suppliers. The Commission agrees, and will, therefore, adopt the Utilities' recommendation to amend proposed Rules R8-67(g)(3) and (4), as shown in Appendix A. (The amendment to Rule R8-67(g)(4) is also shown in the discussion of Issue 17.)

## Issue 17: Measurement Of Thermal Energy Production

The Utilities noted the revised Rule R8-67(g)(4), and stated that the requirement to "explicitly address thermal energy flows as well as heat transfers" is not clear to them. The Commission will, therefore, eliminate the confusing language but notes that owners of thermal facilities will be required to explain their plans for metering or estimating a facility's thermal energy output when they register a thermal facility as a renewable energy facility. Utilities also requested that the rule be clarified to recognize that it is acceptable for meters not to be installed on thermal facilities. The Commission agrees that it is acceptable for thermal energy facilities to use "other industry-accepted means" to estimate a thermal facility's output, and will, therefore, adopt the proposed revision. The Commission will amend proposed Rule R8-67(g)(4) as shown below and in Appendix A:

(4) Thermal energy produced by a combined heat and power system or solar thermal energy facility shall be the thermal energy recovered and used for useful purposes other than electric power production. The useful thermal energy may be measured by meter, or if that is not practicable, by other industry-accepted means that show what measurable amount of useful thermal energy the system or facility is designed and operated to produce and use. Renewable energy certificates shall be earned based on one certificate for every 3,412,000 British thermal units (Btu) of useful thermal energy produced. Meter devices, if used, Btu meters shall be located so as to measure the actual thermal energy consumed by the load served by the facility. Thermal energy output that is used as station power or to process the facility's fuel is not eligible for RECs. Thermal energy production, whether based on engineering estimates or Btu metering, shall explicitly address thermal energy flows as well as heat energy transfers. Thermal energy production data, whether metered or estimated, shall be retained for audit for ten years.

## Issue 18: Participation In REC Tracking System

The Utilities recommended a clarification to proposed Rule R8-67(h)(4) such that a registered renewable energy facility does not have to participate in a REC tracking system unless it wants to have RECs issued or it wants to transfer RECs into

NC-RETS. The Commission believes it is acceptable for the owner of a registered renewable energy facility to decide to forego participation in the REC market. However, the facility must be registered in NC-RETS or another REC tracking system in order for RECs associated with its renewable energy production to be claimed by an electric power supplier for REPS compliance. Therefore, the Commission will adopt the Utilities' proposal, with slight revisions, as shown below and in Appendix A:

(4) Each renewable energy facility or new renewable energy facility registered by the Commission under Rule R8-66 shall participate in NC-RETS in order to have RECs issued, or in another REC tracking system in order to have RECs issued and transferred into NC-RETS, but by no means shall a facility's meter data for the same time period shall be used for simultaneous REC issuance in two such systems ....

#### Issue 19: Historic REC Issuance Limited To Two Years

The Commission's August 3, 2010 Order required that, "beginning January 1, 2011, renewable energy facilities that participate in NC-RETS are only eligible for historic REC issuance for energy production going back two years." Similarly, the Commission proposed to include the same requirement in Rule R8-67(h)(4):

Beginning January 1, 2011, renewable energy facilities registered in NC-RETS may only enter historic energy production data for REC issuance that goes back up to two years from the current date.

The Utilities opposed this decision and proposed rule, with the Utilities asserting that:

[L]imiting meter data uploads to the prior two years precludes an electric [power] supplier from purchasing RECs from a renewable energy facility over the full three year "life" of a REC as provided in R8-67(d)(1). In fact, the NC-RETS limitation on historical uploads renders eligible RECs between two and three years old ineligible.

Similarly, the Municipal Utilities stated that:

Proposed Rule R8-67(h)(4) in its current form arguably would make ineligible RECs purchased by an electric power supplier in 2011 that are of a 2008 vintage if the energy production data associated with the 2008 vintage RECs had not already been entered into NC-RETS by January 1, 2011. If the proposed new rule ... is not modified ... to be consistent with existing Rule R8-67(d)(1), the Commission is in effect amending a rule that electric power suppliers have heretofore relied on since February 29, 2008, when entering into their REC purchase agreements (many of which are undoubtedly for more than 5 year terms), and thereby creating commercial problems for the electric power suppliers because of uncertainty as to the Commission's rules.

G.S. 62-133.8(a)(6) defines a renewable energy certificate, or REC, as:

[A] tradable instrument that is equal to one megawatt hour of electricity or equivalent energy supplied by a renewable energy facility, new renewable energy facility, or reduced by implementation of an energy efficiency measure that is used to track and verify compliance with the requirements of this section as determined by the Commission. A 'renewable energy certificate' does not include the related emission reductions .... [Emphasis added.]

Rule R8-67(d)(1) states, in part:

Renewable energy certificates (whether or not bundled with electric power) claimed by an electric power supplier to comply with G.S. 62-133.8(b), (c), (d), (e) and (f) must have been earned after January 1, 2008; must have been purchased by the electric power supplier within three years of the date they were earned; shall be retired when used for compliance; and shall not be used for any other purpose. [Emphasis added.]

The Commission disagrees that proposed Rule R8-67(h)(4) precludes electric power suppliers from buying RECs that are associated with qualifying energy that was produced up to three years in the past, and there is no conflict between the two provisions, as asserted by the Utilities and the Municipal Utilities. Rather, the new provision requires renewable energy facilities to establish accounts in NC-RETS or another REC tracking system and convert their qualifying energy production into RECs in a timely manner. The deadline adopted by the Commission, with two years of energy production, is consistent with similar deadlines adopted by other registries. This two-year deadline will help ensure the credibility of RECs created in NC-RETS by assuring an accurate audit trail is created before the underlying energy production data is lost or becomes stale. As time passes, it becomes more difficult to accurately address any errors and inconsistencies in energy production data. This is especially true for (1) facilities that use multiple fuels, with the amount of each fuel and the energy content of each fuel type varying from month-to-month; (2) facilities that are allowed to self-report their energy production; and (3) facilities that are allowed to estimate their energy production. In addition, meter malfunctions sometimes cause production data to be inaccurate; sorting out such inaccuracies is more difficult with the passage of time, and accuracy is essential to assure that the correct number of RECs is issued into a facility owner's NC-RETS account.

The Commission is aware of at least one situation in which RECs that had not been issued by a registry were sold to a third party, and that third party requested to have them admitted into NC-RETS. There would be no need to address such issues if each renewable energy facility that secures a registration order from the Commission took the next step, as required in that registration order, and began participating in a REC registry so that RECs could be issued by a tracking system as quickly as possible.

Similarly, the Commission is aware of renewable energy facilities, having been issued a registration order by the Commission, being sold to a new owner without the first owner ever establishing an NC-RETS account and pursuing the issuance of RECs for their qualifying renewable energy production. Such scenarios raise issues that can easily be avoided.

As stated in its August 3, 2010 Order:

The Commission believes that its rules should encourage the issuance of RECs in a tracking system as soon as possible following the production of the energy associated with the RECs. The Commission agrees with the Public Staff that renewable energy facilities should register promptly and record their meter data for REC issuance in NC-RETS (or another registry) without delay. This will enhance the integrity of RECs issued by NC-RETS and ease the Public Staff's auditing responsibilities.

Owners of renewable energy facilities that have been registered with the Commission but have not yet joined a registry are reminded that their order from the Commission approving their facility's registration required them to join a registry for the issuance of RECs.<sup>4</sup>

The Commission is aware that some renewable energy facilities experienced delays in receiving their registration orders from the Commission, and those orders are a prerequisite to having RECs issued in NC-RETS. To allow additional time for all facilities to register and report historical production data, by Order dated December 10, 2010, the Commission established a new deadline of June 1, 2011, that applies to renewable energy facilities and new renewable energy facilities that participate (or intend to participate) in NC-RETS for the purpose of having RECs issued. Until that date, such facilities may have "historic" RECs issued for energy production going back as far as January 1, 2008. But starting on June 1, 2011, such facilities may have RECs issued for only two years' worth of historic energy production data.

#### Issue 20: RECs Must Reside In NC-RETS

The Municipal Utilities proposed modifying Rules R8-67(d)(4) and (h)(2) because "they condition the methods of complying with [Senate Bill 3] on whether or not an out-of-State renewable energy certificate tracking system allows RECs on such system to be imported into NC-RETS."

Proposed Rule R8-67(d)(4) states:

Renewable energy certificates must be issued by, or imported into, the renewable energy certificate tracking system established in Rule R8-67(h)

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<sup>4</sup> If the owner of such a facility, after having received a registration order from the Commission, decides not to pursue the issuance of RECs for sale to a North Carolina electric power supplier pursuant to Senate Bill 3, there would be no need for their facility to participate in a REC registry.

in order to be eligible RECs under G.S. 62-133.8.(b)(2)e or G.S. 62-133.8(c)(2)d.

Similarly, proposed Rule R8-67(h)(2) states:

A renewable energy certificate (REC) tracking system, to be known as NC-RETS, is established by the Commission. NC-RETS shall issue, track, transfer and retire RECs. It shall calculate each electric power supplier's REPS obligation and report each electric power supplier's REPS accomplishments, consistent with the compliance report filed under Rule R8-67(c). NC-RETS shall be administered by a third-party vendor selected by the Commission. Only RECs issued by or imported into NC-RETS are qualifying RECs under G.S. 62-133.8.

The Municipal Utilities are correct that the Commission's rules, as well as the Memorandum of Agreement (MOA) it negotiated with the NC-RETS Administrator, contemplate all RECs used for REPS compliance residing in NC-RETS, and eventually being retired in an NC-RETS retirement sub-account. The Request for Proposals (RFP) that the Commission issued for NC-RETS in Docket No. E-100, Sub 121 required the selected vendor to develop a system that could accommodate REC imports from other tracking systems. NC-RETS can currently accommodate REC imports from three tracking system: the North American Renewables Registry (NAR), the Midwest Renewable Energy Tracking System (M-RETS), and the Western Renewable Energy Generation Information System (WREGIS). The NC-RETS Administrator is continuing to work with other registries to ultimately accommodate transfers between NC-RETS and each of them. The Commission is aware that some electric power suppliers have contracted for RECs that have been issued in the Electric Reliability Council of Texas (ERCOT) tracking system, and that the ERCOT tracking system software did not anticipate exports to other tracking systems. Nonetheless, the NC-RETS Administrator has developed a protocol that will allow the NC-RETS Administrator to facilitate retiring RECs in ERCOT and re-issuing them in NC-RETS. If any electric power supplier owns RECs or is contemplating purchasing RECs in any registries besides NAR, M-RETS, WREGIS or ERCOT, they should communicate that need to the NC-RETS Administrator. While it might become necessary for the Commission to allow exceptions, via waivers, to the requirement that all RECs be either issued in or imported into NC-RETS, the Commission prefers to hold the NC-RETS Administrator accountable for meeting its obligations under the MOA. Therefore, the Commission will decline to adopt the revisions proposed by the Municipal Utilities.

The Commission notes that, as drafted, Rule R8-67(d)(4) would apply only to unbundled RECs, that is, RECs purchased separately from the associated energy. Since that is not the Commission's intent, the Commission will therefore amend Rule R8-67(d)(4) as follows and as shown in Appendix A:

Renewable energy certificates must be issued by, or imported into, the renewable energy certificate tracking system established in Rule R8-67(h)

in order to be eligible RECs under G.S. 62-133.8.(b)(2)e or G.S. 62-133.8(c)(2)d.

#### Issue 21: Deadline For Providing Previous Year's Retail Sales Data

The Municipal Utilities proposed that Rule R8-67(h)(11) be modified "to require an electric power supplier to provide its previous years retail sales by June 1<sup>st</sup> of each year rather than May 1<sup>st</sup>." They stated that the power agencies receive this information on or about April 30 each year and need additional time to review, confirm and input the information into NC-RETS. The Commission believes this is a reasonable request, and will therefore, amend Rule R8-67(h)(11) as suggested by the Municipal Utilities. Because the retail sales information is used by the NC-RETS Administrator to calculate its electric power supplier billings, it is also necessary to move back by one month the annual adjustment to those billings. The Commission, will therefore, amend Rule R8-67(h)(11) as show below and in Appendix A.

All Commission-approved costs of developing and operating NC-RETS shall be allocated among all electric power suppliers based upon their respective share of the total megawatt-hours of retail electricity sales in North Carolina in the previous calendar year. Each electric power supplier, or its utility compliance aggregator, shall, within 60 days of NC-RETS beginning operations, and by ~~May~~ June 1 of each subsequent year, enter its previous year's retail electricity sales into NC-RETS, which sales will be used by NC-RETS to calculate each electric power supplier's REPS obligations and NC-RETS charges. NC-RETS shall update its billings beginning each ~~June~~ July based on retail sales data for the previous calendar year. Such NC-RETS charges shall be deemed to be costs that are reasonable, prudent, incremental, and eligible for recovery through each electric public utility's annual rider established pursuant to G.S. 62-133.8(h).

#### **Amendments to Rule R8-68. Incentive Programs for Electric Public Utilities and Electric Membership Corporations, Including Energy Efficiency and Demand-Side Management Programs**

##### Issue 22: Market Growth For Duration Of Program

The Utilities recommended amending Rule R8-68(c)(2)(iii)b, part of the filing requirements for a new EE or DSM program, as shown below:

(iii) Additionally, an electric public utility shall include or describe:

...

(b) the total market potential and estimated market growth throughout the ~~life of the measure~~ duration of the program;

The Commission finds this amendment to be helpful because potential and estimated market growth “throughout the duration of the program” is more meaningful for planning purposes, than the potential and estimated market growth “throughout the life of the measure,” and will therefore adopt it as show in Appendix A.

#### Issue 23: Measurement And Verification (M&V) Information

The Utilities recommended deleting Rule R8-68(c)(2)(iii)g because it is redundant with a similar provision in Rule R8-68(c)(3)(ii)a. Both provisions require electric public utilities to include measurement and verification information with their EE or DSM program applications, and the Commission agrees that it is appropriate to delete one of them, Rule R8-68(c)(2)(iii)g as suggested by the Utilities. The Commission will also revise the remaining provision, as shown below and in Appendix A, to make clear that the M&V requirements apply to both energy and peak demand savings:

- a. Describe the industry-accepted methods to be used to evaluate, measure, verify, and validate the energy and peak demand savings estimated in (2)(iii)c and d above;

#### Issue 24: Measurement And Verification Of EE And DSM Programs

In addition to the comments filed jointly with the Utilities, Duke filed comments individually on an issue related to M&V for EE and DSM programs. Specifically, Duke proposed the following revisions to Rule R8-68(c)(3)(ii):

(ii) Measurement and Verification Reporting Plan for New Demand-Side Management and Energy Efficiency Measures. — The electric public utility shall be responsible for the measurement and verification of energy and peak demand savings and may use the services of an independent third party for such purposes. The costs of implementing the measurement and verification process may be considered as operating costs for purposes of Commission Rule R8-69. In addition, the electric public utility shall:

...

- d. identify any third party and include an estimate of the costs of that third party, attributable to the specific program or related portfolio of programs, if the electric public utility plans to utilize an independent third party for purposes of measurement and verification.

Duke argued that the Commission's proposed modification to Rule R8-68 would place compliance requirements on utilities that are inconsistent with the standard practices of the M&V process. Duke stated:

Quite simply, the Company does not generally have individualized M&V costs that are identifiable with any single new measure or program. Duke Energy Carolinas' M&V plan operates on a portfolio basis, so to report on costs of M&V for a single new measure may be overstating actual M&V costs for that measure, as such M&V costs are managed at the portfolio level. In the filings Duke...has made to date...the company has estimated its M&V costs associated with the particular program based on a general percentage of the program's costs.

Duke's proposed amendment and the related rationale raise issues that are beyond the scope of this proceeding. The Commission believes Duke's concern is best addressed in the context of a Duke-specific proceeding rather than in this rulemaking docket. Therefore, the Commission will decline to adopt Duke's proposed amendments to Rule R8-68(c)(3)(ii)d.

The Commission notes that on August 24, 2010, it issued an Order Requesting Comments On Measurement And Verification Of Reduced Energy Consumption. In November of 2010 it received responsive comments, and its order is pending. It is possible the Commission will further amend its M&V rules in that order.

### **NC-RETS Operating Procedures**

The Public Staff stated that it is not aware of any conflicts or inconsistencies between the NC-RETS Interim Operating Procedures and the revised Rules R8-64 through R8-69. Duke submitted two minor corrections to the NC-RETS Interim Operating Procedures, which the Commission will adopt in the final NC-RETS Operating Procedures. In addition, Commission Staff and the NC-RETS Administrator suggested minor revisions to conform the NC-RETS Operating Procedures with changes that have been made to NC-RETS, such as the addition of several fuel types and registries from which RECs can be imported into NC-RETS. As discussed previously, the Commission will revise the NC-RETS Operating Procedures to be consistent with Rule R8-66(h) by requiring owners of renewable energy facilities to communicate material changes to the Commission and NC-RETS within 15 days. The Commission will adopt the NC-RETS Operating Procedures as shown in Appendix D and Appendix E.

IT IS, THEREFORE, ORDERED as follows:

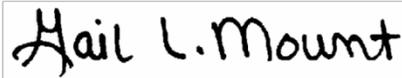
1. The revised Rules R8-64 through R8-69, as shown in Appendix A and Appendix B, are approved.
2. The revised NC-RETS Operating Procedures, as shown in Appendix D and Appendix E, are approved.

3. The Commission will publish on its website Appendix C, a form to assist the owners of renewable energy facilities in filing their renewable energy facility registrations pursuant to Rule R8-66.

ISSUED BY ORDER OF THE COMMISSION.

This the 31<sup>st</sup> day of January, 2011.

NORTH CAROLINA UTILITIES COMMISSION

A rectangular box containing a handwritten signature in black ink that reads "Gail L. Mount".

Gail L. Mount, Deputy Clerk

kj123111.01

**Rule R8-64. APPLICATION FOR CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY BY QUALIFYING COGENERATOR OR SMALL POWER PRODUCER; PROGRESS REPORTS**

(a) Scope of Rule.

(1) This rule applies to applications for a certificate of public convenience and necessity pursuant to G.S. 62-110.1(a) filed by any person seeking the benefits of 16 U.S.C. 824a-3 or G.S. 62-156 as a qualifying cogenerator or a qualifying small power producer as defined in 16 U.S.C. 796(17) and (18) or as a small power producer as defined in G.S. 62-3(27a), except persons exempt from certification by the provisions of G.S. 62-110.1(g).

(2) For purposes of this rule, the term “person” shall include a municipality as defined in Rules R7-2(c) and R10-2(c), including a county of the State.

(3) The construction of a facility for the generation of electricity shall include not only the building of a new building, structure or generator, but also the renovation or reworking of an existing building, structure or generator in order to enable it to operate as a generating facility.

(4) This rule shall apply to any person within its scope who begins construction of an electric generating facility without first obtaining a certificate of public convenience and necessity. In such circumstances, the application shall include an explanation for the applicant’s beginning of construction before the obtaining of the certificate.

(b) The Application.

(1) The application shall be accompanied by maps, plans, and specifications setting forth such details and dimensions as the Commission requires. It shall contain, among other things, the following information, either embodied in the application or attached thereto as exhibits:

(i) The full and correct name, business address, business telephone number, and electronic mailing address of the facility owner;

(ii) A statement of whether the facility owner is an individual, a partnership, or a corporation and, if a partnership, the name and business address of each general partner and, if a corporation, the state and date of incorporation and the name, business address, business telephone number, and electronic mailing address of an individual duly authorized to act as corporate agent for the purpose of the application and, if a foreign corporation, whether domesticated in North Carolina;

(iii) The nature of the generating facility, including the type and source of its power or fuel;

(iv) The location of the generating facility set forth in terms of local highways, streets, rivers, streams, or other generally known local landmarks together with a map, such as a county road map, with the location indicated on the map;

(v) The ownership of the site and, if the owner is other than the applicant, the applicant's interest in the site;

(vi) A description of the buildings, structures and equipment comprising the generating facility and the manner of its operation;

(vii) The projected maximum dependable capacity of the facility in megawatts;

(viii) The projected cost of the facility;

(ix) The projected date on which the facility will come on line;

(x) The applicant's general plan for sale of the electricity to be generated, including the utility to which the applicant plans to sell the electricity; any provisions for wheeling of the electricity; arrangements for firm, non-firm or emergency generation; the service life of the project; the projected annual sales in kilowatt-hours; and the applicant's general plan for the disposition of renewable energy certificates or other environmental attributes whether the applicant intends to produce renewable energy certificates that are eligible for compliance with the State's renewable energy and energy efficiency portfolio standard; and

(xi) A complete list of all federal and state licenses, permits and exemptions required for construction and operation of the generating facility and a statement of whether each has been obtained or applied for. A copy of those that have been obtained should be filed with the application; a copy of those that have not been obtained at the time of the application should be filed with the Commission as soon as they are obtained.

(2) In addition to the information required above, an applicant who desires to enter into a contract for a term of 5 years or more for the sale of electricity and who will have a projected dependable capacity of 5 megawatts or more available for such sale shall include in the application the following information and exhibits:

(i) A statement detailing the experience and expertise of the persons who will develop, design, construct and operate the project to the extent such persons are known at the time of the application;

(ii) Information specifically identifying the extent to which any regulated utility will be involved in the actual operation of the project;

(iii) A statement obtained by the applicant from the electric utility to which the applicant plans to sell the electricity to be generated setting forth an assessment of the impact of such purchased power on the utility's capacity, reserves, generation mix, capacity expansion plan, and avoided costs;

(iv) The most current available balance sheet of the applicant;

(v) The most current available income statement of the applicant;

(vi) An economic feasibility study of the project;

(vii) A statement of the actual financing arrangements entered into in connection with the project to the extent known at the time of the application;

(viii) A detailed explanation of the anticipated kilowatt and kilowatt-hour outputs, on-peak and off-peak, for each month of the year;

(ix) A detailed explanation of all energy inputs and outputs, of whatever form, for the project, including the amount of energy and the form of energy to be sold to each purchaser; and

(x) A detailed explanation of arrangements for fuel supply, including the length of time covered by the arrangements, to the extent known at the time of the application.

(3) All applications shall be signed and verified by the applicant or by an individual duly authorized to act on behalf of the applicant for the purpose of the application.

(4) Applications filed on behalf of a corporation are not subject to the provision of R1-5(d) that requires corporate pleadings to be filed by a member of the Bar of the State of North Carolina. Should a public hearing be required, the requirements of G.S. 84-4 and G.S. 84-4.1 shall be applicable.

(5) Falsification of or failure to disclose any required information in the application may be grounds for denying or revoking any certificate.

(6) The application and 15 copies shall be filed with the Chief Clerk of the Utilities Commission.

(c) Procedure upon receipt of Application. — Upon the filing of an application appearing to meet the requirements set forth above, the Commission will process it as follows:

(1) The Commission will issue an order requiring the applicant to publish notice of the application once a week for four successive weeks in a daily newspaper of general circulation in the county where the generating facility is proposed to be constructed and requiring the applicant to mail a copy of the application and the notice, no later than the first date that such notice is published, to the electric utility to which the applicant plans to sell the electricity to be generated. The applicant shall be responsible for filing with the Commission an affidavit of publication and a signed and verified certificate of service to the effect that the application and notice have been mailed to the electric utility to which the applicant plans to sell the electricity to be generated.

(2) The Chief Clerk will deliver 2 copies of the application and the notice to the Clearinghouse Coordinator of the Office of Policy and Planning of the Department of Administration for distribution by the Coordinator to State agencies having an interest in the application.

(3) If a complaint is received within 10 days after the last date of the publication of the notice, the Commission will schedule a public hearing to determine whether a certificate should be awarded and will give reasonable notice of the time and place of the hearing to the applicant and to each

complaining party and will require the applicant to publish notice of the hearing in the newspaper in which the notice of the application was published. If no complaint is received within the time specified, the Commission may, upon its own initiative, order and schedule a hearing to determine whether a certificate should be awarded and, if the Commission orders a hearing upon its own initiative, it will require notice of the hearing to be published by the applicant in the newspaper in which the notice of the application was published.

(4) If no complaint is received within the time specified and the Commission does not order a hearing upon its own initiative, the Commission will enter an order awarding the certificate.

(d) The Certificate.

(1) The certificate shall be subject to revocation if any of the other federal or state licenses, permits or exemptions required for construction and operation of the generating facility is not obtained and that fact is brought to the attention of the Commission and the Commission finds that as a result the public convenience and necessity no longer requires, or will require, construction of the facility.

(2) The certificate must be renewed by re-compliance with the requirements set forth in this Rule if the applicant does not begin construction within 5 years after issuance of the certificate.

(3) Both before the time construction is completed and after, all certificate holders must advise both the Commission and the utility involved of any plans to sell, transfer, or assign the certificate or the generating facility or of any significant changes in the information set forth in subsection (b)(1) of this Rule, and the Commission will order such proceedings as it deems appropriate to deal with such plans or changes.

(e) Reporting. — All applicants must submit annual progress reports until construction is completed.

#### **Rule R8-65. REPORT BY PERSONS CONSTRUCTING ELECTRIC GENERATING FACILITIES EXEMPT FROM CERTIFICATION REQUIREMENT**

(a) All persons exempt from certification under G.S. 62-110.1(g) shall file with the Commission a report of the proposed construction of an electric generating facility before beginning construction of the facility. The report of proposed construction shall include the information prescribed in subsection (b)(1) of Rule R8-64 and shall be signed and verified by the owner of the electric generating facility or by an individual duly authorized to act on behalf of the owner for the purpose of the filing.

(b) Reports filed on behalf of a corporation are not subject to the provision of Rule R1-5(d) that requires corporate pleadings to be filed by a member of the Bar of the State of North Carolina. Should a public hearing be required, the requirements of G.S. 84-4 and G.S. 84-4.1 shall be applicable.

(c) The owner of the electric generating facility shall provide a copy of the report of proposed construction to the electric public utility, electric membership corporation, or municipality to which the generating facility will be interconnected.

(d) The owner of the electric generating facility shall file an original and 15 copies of the report of proposed construction with the Chief Clerk of the Utilities Commission. No filing fee is required.

(e) Upon the filing of a report of proposed construction, the Chief Clerk will assign a new docket or sub-docket number to the filing and will deliver 2 copies of the report of proposed construction to the Clearinghouse Coordinator of the Office of Policy and Planning of the Department of Administration for distribution by the Coordinator to State agencies having an interest for information only.

(f) The Commission may order a hearing on the report of proposed construction upon its own motion or upon receipt of a complaint specifying the basis thereof. Otherwise, no acknowledgment of receipt of the report of proposed construction will be issued nor will any other further action be taken by the Commission.

#### **Rule R8-66. REGISTRATION OF RENEWABLE ENERGY FACILITIES; ANNUAL REPORTING REQUIREMENTS**

(a) The following terms shall be defined as provided in G.S. 62-133.8: “electric power supplier”; “renewable energy certificate”; and “renewable energy facility.”

(b) The owner, including an electric power supplier, of each renewable energy facility, whether or not required to obtain a certificate of public convenience and necessity pursuant to G.S. 62-110.1, that intends for renewable energy certificates it earns to be eligible for use by an electric power supplier to comply with G.S. 62-133.8 shall register the facility with the Commission. The registration statement may be filed separately or together with an application for a certificate of public convenience and necessity, or with a report of proposed construction by a person exempt from the certification requirement. All relevant renewable energy facilities shall be registered prior to their having RECs issued in the North Carolina Renewable Energy Tracking System (NC-RETS) pursuant to Rule R8-67(h). Contracts for power supplied by an agency of the federal government are exempt from the requirement to register and file annually with the Commission if the renewable energy certificates associated with the power are bundled with the power purchased by the electric power supplier.

(1) The owner of each renewable energy facility that has not previously done so, including a facility that is located outside of the State of North Carolina, shall include in its registration statement the following information:

(i) The full and correct name, business address, electronic mailing address, and telephone number of the facility owner;

(ii) A statement of whether the facility owner is an individual, a partnership, or a corporation and, if a partnership, the name and business address of each general partner and, if a corporation, the state and date of incorporation and the name, business telephone number, electronic mailing address, and business address, of an individual duly authorized to

act as corporate agent for the purpose of the application and, if a foreign corporation, whether domesticated in North Carolina;

(iii) The nature of the renewable energy facility, including its technology, the type and source of its power or fuel(s); whether it produces electricity, useful thermal energy, or both; and the facility's projected dependable capacity in megawatts AC and/or British thermal units, as well as its maximum nameplate capacity;

(iv) The location of the facility set forth in terms of local highways, streets, rivers, streams, or other generally known local landmarks together with a map, such as a county road map, with the location indicated on the map;

(v) The ownership of the site and, if the site owner is other than the facility owner, the facility owner's interest in the site;

(vi) A complete list of all federal and state licenses, permits, and exemptions required for construction and operation of the facility, and a statement of whether each has been obtained or applied for. A copy of those that have been obtained should be filed with the application. Wind facilities with multiple turbines, where each turbine is licensed separately, may provide copies of such approvals for one such turbine of each type in the facility, but shall attest that approvals for all of the turbines are available for inspection;

(vii) The date the facility began operating. If the facility is not yet operating, the owner shall provide the facility's projected in-service date;

(viii) If the facility is already operating, the owner shall provide information regarding the amount of energy produced by the facility, net of station use, for the most recent 12-month or calendar-year period. Energy production data for a shorter time period is acceptable for facilities that have not yet operated for a full year;

(ix) The name of the entity that does (or will) read the facility's energy production meter(s) for the purpose of renewable energy certificate issuance; and

(x) Whether the facility participates in a REC tracking system, and if so, which one. If the facility does not currently participate in a REC tracking system, which tracking system the owner anticipates will be used for the purpose of REC issuance.

(2) The owner of each renewable energy facility shall certify in its registration statement and annually thereafter that it is in substantial compliance with all federal and state laws, regulations, and rules for the protection of the environment and conservation of natural resources. If a credible showing is made that the facility is not in substantial compliance with all federal and state laws, regulations, and rules for the protection of the environment and conservation of natural resources, the Commission shall refer the matter to the appropriate environmental agency for review. Registration shall not be revoked unless and

until the appropriate environmental agency concludes that the facility is out of compliance and the Commission issues an order revoking the registration.

(3) The owner of each renewable energy facility shall certify in its registration statement and annually thereafter that the facility satisfies the requirements of G.S. 62-133.8(a)(5) or (7) as a renewable energy facility or new renewable energy facility, that the facility will be operated as a renewable energy facility or new renewable energy facility, and, if the facility has been placed into service, the date when it was placed into service.

(4) The owner of each renewable energy facility shall further certify in its registration statement and annually thereafter that any renewable energy certificates (whether or not bundled with electric power) sold to an electric power supplier to comply with G.S. 62-133.8 have not, and will not, be remarketed or otherwise resold for any other purpose, including another renewable energy portfolio standard or voluntary purchase of renewable energy certificates in North Carolina (such as NC GreenPower) or any other state or country, and that the electric power associated with the certificates will not be offered or sold with any representation that the power is bundled with renewable energy certificates.

(5) The owner of each renewable energy facility shall certify in its registration statement and annually thereafter that it consents to the auditing of its books and records by the Public Staff insofar as those records relate to transactions with North Carolina electric power suppliers, and agrees to provide the Public Staff and the Commission access to its books and records, wherever they are located, and to the facility.

(6) If the facility is already operating, the owner shall attest that the registration information is true and accurate for all years that the facility has earned RECs for compliance with G.S. 62-133.8. Each registration statement shall be signed and verified by the owner of the renewable energy facility or by an individual duly authorized to act on behalf of the owner for the purpose of the filing.

(7) Renewable energy facilities and new renewable energy facilities that have RECs issued in NC-RETS shall provide their annual certification electronically via NC-RETS. Annual certifications are due April 1 each year.

(8) Registration statements filed on behalf of a corporation are not subject to the provision of Rule R1-5(d) that requires corporate pleadings to be filed by a member of the Bar of the State of North Carolina. Should a public hearing be required, the requirements of G.S. 84-4 and G.S. 84-4.1 shall be applicable.

(9) An original and 15 copies of the registration statement shall be filed with the Chief Clerk of the Utilities Commission. No filing fee is required to be submitted with the registration statement.

(c) Each re-seller of renewable energy certificates derived from a renewable energy facility, including a facility that is located outside of the State of North Carolina, shall ensure that the owner of the renewable energy facility registers with the Commission prior to the sale of the certificates by the re-seller to an electric power

supplier to comply with G.S. 62-133.8(b), (c), (d), (e) and (f), except that the filing requirements in subsection (b) of this Rule shall apply only to information for the year(s) corresponding to the year(s) in which the certificates to be sold were earned.

(d) Upon receipt of a registration statement, the Chief Clerk will assign a new docket or sub-docket number to the filing. The Chief Clerk will deliver 2 copies of the registration statement to the Clearinghouse Coordinator of the Office of Policy and Planning of the Department of Administration for distribution by the Coordinator to State agencies having an interest in the filing for information only.

(e) No later than ten (10) business days after the registration statement is filed with the Commission, the Public Staff shall, and any other interested persons may, file with the Commission and serve upon the registrant a recommendation regarding whether the registration statement is complete and identifying any deficiencies. If the Commission determines that the registration statement is not complete, the owner of the renewable energy facility will be required to file the missing information. Upon receipt of all required information, the Commission will promptly issue an order accepting the registration, denying the registration, or setting the matter for hearing.

(f) Any of the following actions may result in revocation of registration by the Commission:

(1) Falsification of or failure to disclose any required information in the registration statement or annual filing;

(2) Failure to remain in substantial compliance with all federal and state laws, regulations, and rules for the protection of the environment and conservation of natural resources;

(3) Remarketing or reselling any renewable energy certificate (whether or not bundled with electric power) after it has been sold to an electric power supplier or any other person for compliance with G.S. 62-133.8 or for any other purpose, including another renewable energy portfolio standard or voluntary purchase of renewable energy certificates in North Carolina or any other state or country, or offering or selling the electric power associated with the certificates with any representation that the power is bundled with renewable energy certificates;

(4) Failure to allow the Commission or the Public Staff access to its books and records necessary to audit REPS compliance; or

(5) Failure to provide the annual certifications required by Rule R8-66(b).

(g) NC-RETS shall maintain on its website a list of all registration statement revocations.

(h) An owner of a renewable energy facility that has registered with the Commission shall notify the Commission and the tracking system that issues the facility's RECs within fifteen (15) days of any material change in status, including ownership change, fuel change, or permit issuance or revocation. An owner of a renewable energy facility shall also notify the Commission if it wants to withdraw its registration.

**Rule R8-67. RENEWABLE ENERGY AND ENERGY EFFICIENCY PORTFOLIO STANDARD (REPS)**

## (a) Definitions.

(1) The following terms shall be defined as provided in G.S. 62-133.8: “Combined heat and power system”; “demand-side management”; “electric power supplier”; “new renewable energy facility”; “renewable energy certificate”; “renewable energy facility”; “renewable energy resource”; and “incremental costs.”

(2) For purposes of determining an electric power supplier’s avoided costs, “avoided cost rates” mean an electric power supplier’s most recently approved or established avoided cost rates in this state, as of the date the contract is executed, for purchases of electricity from qualifying facilities pursuant to Section 210 of the Public Utility Regulatory Policies Act of 1978. If the Commission has approved an avoided cost rate for the electric power supplier for the year when the contract is executed, applicable to contracts of the same nature and duration as the contract between the electric power supplier and the seller, that rate shall be used as the avoided cost. Therefore, for example, for a contract by an electric public utility with a term of 15 years, the avoided cost rate applicable to that contract would be the comparable, Commission-approved, 15-year, long-term, levelized rate in effect at the time the contract was executed. In all other cases, the avoided cost shall be a good faith estimate of the electric power supplier’s avoided cost, levelized over the duration of the contract, determined as of the date the contract is executed, taking into consideration the avoided cost rates then in effect as established by the Commission. In any event, when found by the Commission to be appropriate and in the public interest, a good faith estimate of an electric public utility’s avoided cost, levelized over the duration of the contract, determined as of the date the contract is executed, may be used in a particular REPS cost recovery proceeding. Determinations of avoided costs, including estimates thereof, shall be subject to continuing Commission oversight and, if necessary, modification should circumstances so require.

(3) “Energy efficiency measure” means an equipment, physical, or program change that when implemented results in less use of energy to perform the same function or provide the same level of service. “Energy efficiency measure” does not include demand-side management. It includes energy produced from a combined heat and power system that uses nonrenewable resources to the extent the system:

- (i) Uses waste heat to produce electricity or useful, measurable thermal or mechanical energy at a retail electric customer’s facility; and
- (ii) Results in less energy used to perform the same function or provide the same level of service at a retail electric customer’s facility.

(4) “Year-end number of customer accounts” means the number of accounts within each customer class as of December 31 for a given calendar

year determined in a manner approved by the Commission pursuant to subsection (c)(4) or determined in the same manner as that information is reported to the Energy Information Administration, United States Department of Energy, for annual electric sales and revenue reporting.

(5) “Utility compliance aggregator” is an organization that assists an electric power supplier in demonstrating its compliance with REPS. Such demonstration may include, among other things, filing REPS compliance plans or reports and participating in NC-RETS on behalf of the electric power supplier or a group of electric power suppliers.

(b) REPS compliance plan.

(1) Each year, beginning in 2008, each electric power supplier or its designated utility compliance aggregator, shall file with the Commission the electric power supplier’s plan for complying with G.S. 62-133.8(b), (c), (d), (e) and (f). The plan shall cover the calendar year in which the plan is filed and the immediately subsequent two calendar years. At a minimum, the plan shall include the following information:

(i) a specific description of the electric power supplier’s planned actions to comply with G.S. 62-133.8(b), (c), (d), (e) and (f) for each year;

(ii) a list of executed contracts to purchase renewable energy certificates (whether or not bundled with electric power), including type of renewable energy resource, expected MWh, and contract duration;

(iii) a list of planned or implemented energy efficiency measures, including a brief description of the measure and projected impacts;

(iv) the projected North Carolina retail sales and year-end number of customer accounts by customer class for each year;

(v) the current and projected avoided cost rates for each year;

(vi) the projected total and incremental costs anticipated to implement the compliance plan for each year;

(vii) a comparison of projected costs to the annual cost caps for each year;

(viii) for electric public utilities, an estimate of the amount of the REPS rider and the impact on the cost of fuel and fuel-related costs rider necessary to fully recover the projected costs; and

(ix) to the extent not already filed with the Commission, the electric power supplier shall, on or before September 1 of each year, file a renewable energy facility registration statement pursuant to Rule R8-66 for any facility it owns and upon which it is relying as a source of power or RECs in its REPS compliance plan.

(2) Each electric power supplier shall file its REPS compliance plan with the Commission on or before September 1 of each year.

(3) Any electric power supplier subject to Rule R8-60 shall file its REPS compliance plan as part of its integrated resource plan filing, and the

REPS compliance plan will be reviewed and approved pursuant to Rule R8-60. Approval of the REPS compliance plan as part of the integrated resource plan shall not constitute an approval of the recovery of costs associated with REPS compliance or a determination that the electric power supplier has complied with G.S. 62-133.8(b), (c), (d), (e), and (f).

(4) An REPS compliance plan filed by an electric power supplier not subject to Rule R8-60 shall be for information only.

(c) REPS compliance report.

(1) Each year, beginning in 2009, each electric power supplier or its designated utility compliance aggregator shall file with the Commission a report describing the electric power supplier's compliance with the requirements of G.S. 62-133.8(b), (c), (d), (e) and (f) during the previous calendar year. The report shall include all of the following information, including supporting documentation:

(i) the sources, amounts, and costs of renewable energy certificates, by source, used to comply with G.S. 62-133.8(b), (c), (d), (e) and (f). Renewable energy certificates for energy efficiency may be based on estimates of reduced energy consumption through the implementation of energy efficiency measures, to the extent approved by the Commission;

(ii) the actual North Carolina retail sales and year-end number of customer accounts by customer class;

(iii) the current avoided cost rates and the avoided cost rates applicable to energy received pursuant to long-term power purchase agreements;

(iv) the actual total and incremental costs incurred during the calendar year to comply with G.S. 62-133.8(b), (c), (d), (e) and (f);

(v) a comparison of the actual compliance incremental costs incurred during the calendar year to the per-account annual charges (in G.S. 62-133.8(g)(4)) applied to its total number of customer accounts as of December 31 of the previous calendar year to the annual cost caps;

(vi) the status of compliance with the requirements of G.S. 62-133.8(b), (c), (d), (e) and (f). ~~To the extent that compliance with the requirements of G.S. 62-133.8(b), (c), (d), (e) and (f) has not been achieved, the electric power supplier shall provide a comparison of the actual incremental costs incurred during the calendar year to the per-account annual charges (in G.S. 62-133.8(g)(4)) applied to its total number of customer accounts as of December 31 of the previous calendar year;~~

(vii) the identification of any renewable energy certificates or energy savings to be carried forward pursuant to G.S. 62-133.8(b)(2)f or (c)(2)f;

(viii) the dates and amounts of all payments made for renewable energy certificates; and

(ix) for electric membership corporations and municipal electric suppliers, reduced energy consumption achieved after January 1, 2008, through the implementation of a demand-side management program.

(2) Each electric public utility shall file its annual REPS compliance report, together with direct testimony and exhibits of expert witnesses, on the same date that it files (1) its cost recovery request under Rule R8-67(e), and (2) the information required by Rule R8-55. The Commission shall consider each electric public utility's REPS compliance report at the hearing provided for in subsection (e) of this rule and shall determine whether the electric public utility has complied with G.S. 62-133.8(b), (d), (e) and (f). Public notice and deadlines for intervention and filing of additional direct and rebuttal testimony and exhibits shall be as provided for in subsection (e) of this rule.

(3) Each electric membership corporation and municipal electric supplier or their designated utility compliance aggregator shall file a verified REPS compliance report on or before September 1 of each year. The Commission may issue an order scheduling a hearing to consider the REPS compliance report filed by each electric membership corporation or municipal electric supplier, requiring public notice, and establishing deadlines for intervention and the filing of direct and rebuttal testimony and exhibits.

(4) In each electric power supplier's initial REPS compliance report, the electric power supplier shall propose a methodology for determining its cap on incremental costs incurred to comply with G.S. 62-133.8(b), (c), (d), (e) and (f) and fund research as provided in G.S. 62-133.8(h)(1), including a determination of year-end number of customer accounts. The proposed methodology may be specific to each electric power supplier, shall be based upon a fair and reasonable allocation of costs, and shall be consistent with G.S. 62-133.8(h). The electric power supplier may propose a different methodology that meets the above requirements in a subsequent REPS compliance report filing. For electric public utilities, this methodology shall also be used for assessing the per-account charges pursuant to G.S. 62-133.8(h)(5).

(5) In any year, an electric power supplier or other interested party may petition the Commission to modify or delay the provisions of G.S. 62-133.8(b), (c), (d), (e) and (f), in whole or in part. The Commission may grant such petition upon a finding that it is in the public interest to do so. If an electric power supplier is the petitioner, it shall demonstrate that it has made a reasonable effort to meet the requirements of such provisions. Retroactive modification or delay of the provisions of G.S. 62-133.8(b), (c), (d), (e) or (f) shall not be permitted. The Commission shall allow a modification or delay only with respect to the electric power supplier or group of electric power suppliers for which a need for a modification or delay has been demonstrated.

(6) A group of electric power suppliers may aggregate their REPS obligations and compliance efforts provided that all suppliers in the group are subject to the same REPS obligations and compliance methods as stated in either G.S. 133.8(b) or (c). If such a group of electric power suppliers fails to

meet its REPS obligations, the Commission shall find and conclude that each supplier in the group, individually, has failed to meet its REPS obligations.

(d) Renewable energy certificates.

(1) Renewable energy certificates (whether or not bundled with electric power) claimed by an electric power supplier to comply with G.S. 62-133.8(b), (c), (d), (e) and (f) must have been earned after January 1, 2008; must have been purchased by the electric power supplier within three years of the date they were earned; shall be retired when used for compliance; and shall not be used for any other purpose. A renewable energy certificate may be used to comply with G.S. 62-133.8(b), (c), (d), (e) and (f) in the year in which it is acquired or obtained by an electric power supplier or in any subsequent year; provided, however, that an electric public utility must use a renewable energy certificate to comply with G.S. 62-133.8(b), (d), (e) and (f) within seven years of cost recovery pursuant to subsection (e)(10) of this Rule.

(2) For any facility that uses both renewable energy resources and nonrenewable energy resources to produce energy, the facility shall earn renewable energy certificates based only upon the energy derived from renewable energy resources in proportion to the relative energy content of the fuels used.

(3) Renewable energy certificates earned by a renewable energy facility after the date the facility's registration is revoked by the Commission shall not be used to comply with G.S. 62-133.8(b), (c), (d), (e) and (f).

(4) Renewable energy certificates must be issued by, or imported into, the renewable energy certificate tracking system established in Rule R8-67(h) in order to be eligible RECs under G.S. 62-133.8(b)(2)e or ~~G.S. 62-133.8(c)(2)d~~.

(e) Cost recovery.

(1) For each electric public utility, the Commission shall schedule an annual public hearing pursuant to G.S. 62-133.8(h) to review the costs incurred by the electric public utility to comply with G.S. 62-133.8(b), (d), (e) and (f). The annual rider hearing for each electric public utility will be scheduled as soon as practicable after the hearing held by the Commission for the electric public utility under Rule R8-55.

(2) The Commission shall permit each electric public utility to charge an increment or decrement as a rider to its rates to recover in a timely manner the reasonable incremental costs prudently incurred to comply with G.S. 62-133.8(b), (d), (e) and (f). The cost of an unbundled renewable energy certificate, to the extent that it is reasonable and prudently incurred, is an incremental cost and has no avoided cost component.

(3) Unless otherwise ordered by the Commission, the test period for each electric public utility shall be the same as its test period for purposes of Rule R8-55.

(4) Rates set pursuant to this section shall be recovered during a fixed cost recovery period that shall coincide, to the extent practical, with the recovery

period for the cost of fuel and fuel-related cost rider established pursuant to Rule R8-55.

(5) The incremental costs will be further modified through the use of an REPS experience modification factor (REPS EMF) rider. The REPS EMF rider will reflect the difference between reasonable and prudently incurred incremental costs and the revenues that were actually realized during the test period under the REPS rider then in effect. Upon request of the electric public utility, the Commission shall also incorporate in this determination the experienced over-recovery or under-recovery of the incremental costs up to thirty (30) days prior to the date of the hearing, provided that the reasonableness and prudence of these costs shall be subject to review in the utility's next annual REPS cost recovery hearing.

(6) The REPS EMF rider will remain in effect for a fixed 12-month period following establishment and will carry through as a rider to rates established in any intervening general rate case proceedings.

(7) Pursuant to G.S. 62-130(e), any over-collection of reasonable and prudently incurred incremental costs to be refunded to a utility's customers through operation of the REPS EMF rider shall include an amount of interest, at such rate as the Commission determines to be just and reasonable, not to exceed the maximum statutory rate.

(8) Each electric public utility shall follow deferred accounting with respect to the difference between actual reasonable and prudently-incurred incremental costs and related revenues realized under rates in effect.

(9) The incremental costs to be recovered by an electric public utility in any cost recovery period from its North Carolina retail customers to comply with G.S. 62-133.8(b), (d), (e), and (f) shall not exceed the per-account charges set forth in G.S. 62-133.8(h)(4) applied to the electric public utility's year-end number of customer accounts determined as of December 31 of the previous calendar year. These annual charges shall be collected through fixed monthly charges. Each electric public utility shall ensure that the incremental costs recovered under the REPS rider and REPS EMF rider during the cost recovery period, inclusive of gross receipts tax and the regulatory fee, from any given customer account do not exceed the applicable per-account charges set forth in G.S. 62-133.8(h)(4).

(10) Incremental incurred costs incurred during a calendar year toward a current or future year's REPS obligation may be recovered by an electric public utility in any 12-month recovery period up to and including the 12-month recovery period in which the RECs associated with any incremental costs are retired toward the prior year's REPS obligation, after a renewable energy certificate is acquired or obtained until the renewable energy certificate is used to comply with ~~G.S. 62-133.8(b), (d), (e) and (f)~~ as long as the electric public utility's charges to total annual incremental costs recovered from customers in that year do not exceed, in any 12-month period, the per-account annual charges provided in G.S. 62-133.8(h)(4). ~~Incremental costs that exceed the per-account annual charges provided in G.S. 62-133.8(h)(4) in the year in which a renewable energy~~

~~certificate is used to comply with G.S. 62-133.8(b), (d), (e), and (f) may not be recovered.~~ A renewable energy certificate must be used for compliance and retired within seven years of the year in which the electric public utility recovers the related costs from customers. An electric public utility shall refund to customers with interest the costs for renewable energy certificates that are not used for compliance within seven years.

(11) Each electric public utility, at a minimum, shall submit to the Commission for purposes of investigation and hearing the information required for the REPS compliance report for the 12-month test period established in subsection (3) normalized, as appropriate, consistent with Rule R8-55, accompanied by supporting workpapers and direct testimony and exhibits of expert witnesses, and any change in rates proposed by the electric public utility at the same time that it files the information required by Rule R8-55.

(12) The electric public utility shall publish a notice of the annual hearing for two (2) successive weeks in a newspaper or newspapers having general circulation in its service area, normally beginning at least 30 days prior to the hearing, notifying the public of the hearing before the Commission pursuant to G.S. 62-133.8(h) and setting forth the time and place of the hearing.

(13) Persons having an interest in said hearing may file a petition to intervene setting forth such interest at least 15 days prior to the date of the hearing. Petitions to intervene filed less than 15 days prior to the date of the hearing may be allowed in the discretion of the Commission for good cause shown.

(14) The Public Staff and other intervenors shall file direct testimony and exhibits of expert witnesses at least 15 days prior to the hearing date. If a petition to intervene is filed less than 15 days prior to the hearing date, it shall be accompanied by any direct testimony and exhibits of expert witnesses the intervenor intends to offer at the hearing.

(15) The electric public utility may file rebuttal testimony and exhibits of expert witnesses no later than 5 days prior to the hearing date.

(16) The burden of proof as to whether the costs were reasonable and prudently incurred shall be on the electric public utility.

(f) Contracts with owners of renewable energy facilities.

(1) The terms of any contract entered into between an electric power supplier and a new solar electric facility or new metered solar thermal energy facility shall be of sufficient length to stimulate development of solar energy.

(2) Each electric power supplier shall include appropriate language in all agreements for the purchase of renewable energy certificates (whether or not bundled with electric power) prohibiting the seller from remarketing the renewable energy certificates being purchased by the electric power supplier.

(g) Metering of renewable energy facilities.

(1) Except as provided below, for the purpose of receiving renewable energy certificate issuance in NC-RETS, the electric power generated by a

renewable energy facility shall be measured by an electric meter supplied by and read by an electric power supplier. Facilities whose renewable energy certificates are issued in a tracking system other than NC-RETS shall be subject to the requirements of the applicable state commission and/or tracking system.

(2) The electric power generated by an inverter-based solar photovoltaic (PV) system with a nameplate capacity of 10 kW or less may be estimated using generally accepted analytical tools.

(3) The electric power generated by a renewable energy facility interconnected on the customer's side of the utility meter at a customer's location may be measured by (1) an ANSI-certified electric meter not provided by an electric power supplier provided that the owner of the meter complies with the meter testing requirements of Rule R8-13, or (2) another industry-accepted, auditable and accurate metering, controls, and verification system. The data provided by such meter or system may be read and self-reported by the owner of the renewable energy facility, subject to audit by the Public Staff. The owner of the meter shall retain for audit for 10 years the energy output data.

(4) Thermal energy produced by a combined heat and power system or solar thermal energy facility shall be the thermal energy recovered and used for useful purposes other than electric power production. The useful thermal energy may be measured by meter, or if that is not practicable, by other industry-accepted means that show what measurable amount of useful thermal energy the system or facility is designed and operated to produce and use. Renewable energy certificates shall be earned based on one certificate for every 3,412,000 British thermal units (Btu) of useful thermal energy produced. Meter devices, if used, Btu meters shall be located so as to measure the actual thermal energy consumed by the load served by the facility. Thermal energy output that is used as station power or to process the facility's fuel is not eligible for RECs. Thermal energy production, whether based on engineering estimates or Btu metering, shall explicitly address thermal energy flows as well as heat energy transfers. Thermal energy production data, whether metered or estimated, shall be retained for audit for 10 years.

(h) North Carolina Renewable Energy Certificate Tracking System (NC-RETS)

(1) Definitions

(i) "Balancing area operator" means an electric power supplier that has the responsibility to act as the balancing authority for a portion of the regional transmission grid, including maintaining the load-to-generation balance, accounting for energy delivered into and exported out of the area, and supporting interconnection frequency in real time.

(ii) "Multi-fuel facility" means a renewable energy facility that produces energy using more than one fuel type, potentially relying on a fuel that does not qualify for REC issuance in North Carolina.

(iii) "Participant" means a person or organization that opens an account in NC-RETS.

(iv) "Qualifying thermal energy output" is the useful thermal energy: (1) that is made available to an industrial or commercial process (net of any heat contained in condensate return and/or makeup water); (2) that is used in a heating application (e.g., space heating, domestic hot water heating); or (3) that is used in a space cooling application (i.e., thermal energy used by an absorption chiller).

(2) A renewable energy certificate (REC) tracking system, to be known as NC-RETS, is established by the Commission. NC-RETS shall issue, track, transfer and retire RECs. It shall calculate each electric power supplier's REPS obligation and report each electric power supplier's REPS accomplishments, consistent with the compliance report filed under Rule R8-67(c). NC-RETS shall be administered by a third-party vendor selected by the Commission. Only RECs issued by or imported into NC-RETS are qualifying RECs under G.S. 62-133.8.

(3) Each electric power supplier shall be a participant in NC-RETS and shall provide data to NC-RETS to calculate its REPS obligation and to demonstrate its compliance with G.S. 62-133.8. An electric power supplier may select a utility compliance aggregator to participate in NC-RETS on its behalf and file REPS compliance plans and compliance reports, but the supplier shall nonetheless remain responsible for its own compliance. For reporting purposes, an electric power supplier or its utility compliance aggregator may aggregate the supplier's compliance obligations and accomplishments with those of other suppliers that are subject to the same obligations under G.S. 62-133.8.

(4) Each renewable energy facility or new renewable energy facility registered by the Commission under Rule R8-66 shall participate in NC-RETS in order to have RECs issued, or in another REC tracking system in order to have RECs issued and transferred into NC-RETS, but ~~by no means shall a facility's meter data for the same time period~~ shall be used for simultaneous REC issuance in two such systems. Beginning ~~January~~ June 1, 2011, renewable energy facilities registered in NC-RETS may only enter historic energy production data for REC issuance that goes back up to two years from the current date. Facilities that produce energy using one or more renewable energy resource(s) and another resource that does not qualify toward REPS compliance under G.S. 62-133.8 shall calculate on a monthly basis and provide to NC-RETS the percentage of energy output attributable to each fuel source. NC-RETS will issue RECs only for energy emanating from sources that qualify under G.S. 62-133.8.

(5) Each balancing area operator shall provide monthly electric generation production data to NC-RETS for renewable and new renewable energy facilities that are interconnected to the operator's electric transmission system. Such balancing area operator shall retain documentation verifying the production data for audit by the Public Staff.

(6) Each electric power supplier that has registered renewable energy facilities or new renewable energy facilities interconnected with its electric distribution system and that reads the electric generation production meters for

those facilities shall provide monthly the facilities' energy output to NC-RETS, and shall retain for audit for 10 years that energy output data. Municipalities and electric membership corporations may elect to have the facilities' production data reported to NC-RETS and retained for audit by a utility compliance aggregator.

(7) A renewable energy facility or new renewable energy facility that produces thermal energy that qualifies for RECs shall report the facility's qualifying thermal energy output to NC-RETS at least every 12 months. A renewable energy facility or new renewable energy facility that reports its data pursuant to Rule R8-67(g)(3) shall report its energy output to NC-RETS at least every 12 months.

(8) The owner of an inverter-based solar photovoltaic system with a nameplate capacity of 10 kW or less may estimate its energy output using generally accepted analytical tools pursuant to Rule R8-67(g)(2). Such an owner, or its agent, of this kind of facility shall report the facility's energy output to NC-RETS at least every 12 months.

(9) All energy output and fuel data for multi-fuel facilities, including underlying documentation, calculations, and estimates, shall be retained for audit for at least ten years immediately following the provision of the output data to NC-RETS or another tracking system, as appropriate.

(10) Each electric power supplier that complies with G.S. 62-133.8 by implementing energy efficiency or demand-side management programs shall use NC-RETS to report the estimated and verified energy savings of those programs. Municipal power suppliers and electric membership corporations may elect to have their estimated and verified energy savings from their energy efficiency and demand-side management programs reported to NC-RETS by a utility compliance aggregator, and to have their reported savings consolidated with the reported savings from other municipal power suppliers or electric membership corporations if and as necessary to permit aggregate reporting through their utility compliance aggregators. Records regarding which electric power supplier achieved the energy efficiency and demand-side management, the programs that were used, and the year in which it was achieved, shall be retained for audit.

(11) All Commission-approved costs of developing and operating NC-RETS shall be allocated among all electric power suppliers based upon their respective share of the total megawatt-hours of retail electricity sales in North Carolina in the previous calendar year. Each electric power supplier, or its utility compliance aggregator, shall, within 60 days of NC-RETS beginning operations, and by ~~May~~ June 1 of each subsequent year, enter its previous year's retail electricity sales into NC-RETS, which sales will be used by NC-RETS to calculate each electric power supplier's REPS obligations and NC-RETS charges. NC-RETS shall update its billings beginning each ~~June~~ July based on retail sales data for the previous calendar year. Such NC-RETS charges shall be deemed to be costs that are reasonable, prudent, incremental, and eligible for recovery through each electric public utility's annual rider established pursuant to G.S. 62-133.8(h).

(12) Each account holder in NC-RETS shall pay the NC-RETS administrator for service according to the following fee schedule:

(i) \$0.01 for each REC export to an account residing in a different REC tracking system.

(ii) \$0.01 for each REC retired for reasons other than compliance with G.S. 62-133.8.

(13) The Commission shall adopt NC-RETS Operating Procedures. The Commission shall establish an NC-RETS Stakeholder Group that shall meet from time to time and which may recommend changes to the NC-RETS Operating Procedures and NC-RETS.

(14) All data retention requirements of this Rule R8-67(h) may be accomplished via retention of electronic documents.

### **Rule R8-68. INCENTIVE PROGRAMS FOR ELECTRIC PUBLIC UTILITIES AND ELECTRIC MEMBERSHIP CORPORATIONS, INCLUDING ENERGY EFFICIENCY AND DEMAND-SIDE MANAGEMENT PROGRAMS**

(a) Purpose. — The purpose of this rule is to establish guidelines for the application of G.S. 62-140(c) and G.S. 62-133.9 to electric public utilities and electric membership corporations that are consistent with the directives of those statutes and consistent with the public policy of this State as set forth in G.S. 62-2.

(b) Definitions.

(1) Unless listed below, the definitions of all terms used in this rule shall be as set forth in Rule R8-67(a), or if not defined therein, then as set forth in G.S. 62-3, G.S. 62-133.8(a) and G.S. 62-133.9(a).

(2) “Consideration” means anything of economic value paid, given, or offered to any person by an electric public utility or electric membership corporation (regardless of the source of the “consideration”) including, but not limited to: payments to manufacturers, builders, equipment dealers, contractors including HVAC contractors, electricians, plumbers, engineers, architects, and/or homeowners or owners of multiple housing units or commercial establishments; cash rebates or discounts on equipment/appliance sales, leases, or service installation; equipment/ appliances sold below fair market value or below their cost to the electric public utility or electric membership corporation; low interest loans, defined as loans at an interest rate lower than that available to the person to whom the proceeds of the loan are made available; studies on energy usage; model homes; and payment of trade show or advertising costs. Excepted from the definition of “consideration” are favors and promotional activities that are de minimis and nominal in value and that are not directed at influencing fuel choice decisions for specific applications or locations.

(3) “Costs” include, but are not limited to, all capital costs (including cost of capital and depreciation expenses), administrative costs, implementation costs, participation incentives, and operating costs. “Costs” does not include utility incentives.

(4) “Electric public utility” means a person, whether organized under the laws of this State or under the laws of any other state or country, now or hereafter owning or operating in this State equipment or facilities for producing, transporting, distributing, or furnishing electric service to or for the public for consumption. For purposes of this rule, “electric public utility” does not include electric membership corporations.

(5) “Net lost revenues” means the revenue losses, net of marginal costs avoided at the time of the lost kilowatt-hour sale(s), or in the case of purchased power, in the applicable billing period, incurred by the electric public utility as the result of a new demand-side management or energy efficiency measure. Net lost revenues shall also be net of any increases in revenues resulting from any activity by the electric public utility that causes a customer to increase demand or energy consumption, whether or not that activity has been approved pursuant to this Rule R8-68.

(6) “New demand-side management or energy efficiency measure” means a demand-side management or energy efficiency measure that is adopted and implemented on or after January 1, 2007, including subsequent changes and modifications to any such measure. Cost recovery for “new demand-side management measures” and “new energy efficiency measures” is subject to G.S. 62-133.9.

(7) “Participation incentive” means any consideration associated with a new demand-side management or energy efficiency measure.

(8) “Program” or “measure” means any electric public utility action or planned action that involves the offering of consideration.

(9) “Utility incentives” means incentives as described in G.S. 62-133.9(d)(2)a-c.

(c) Filing for Approval.

(1) Application of Rule.

(i) Prior to an electric public utility or electric membership corporation implementing any measure or program, the purpose or effect of which is to directly or indirectly alter or influence the decision to use the electric public utility’s or electric membership corporation’s service for a particular end use or to directly or indirectly encourage the installation of equipment that uses the electric public utility’s or electric membership corporation’s service, or any new or modified demand-side management or energy efficiency measure, the electric public utility or the electric membership corporation shall obtain Commission approval, regardless of whether the measure or program is offered at the expense of the shareholders, ratepayers, or third-party.

(ii) This requirement shall also apply to measures and programs that are administered, promoted, or funded by the electric public utility’s or electric membership corporation’s subsidiaries, affiliates, or unregulated divisions or businesses if the electric public utility or electric membership corporation has control over the entity offering or is involved in the

measure or program and an intent or effect of the measure or program is to adopt, secure, or increase the use of the electric public utility's public utility services.

(iii) Any application for approval by an electric public utility or electric membership corporation of a measure or program under this rule shall be made in a unique sub-docket of the electric public utility's or electric membership corporation's docket number.

(2) Filing Requirements. — Each application for the approval shall include:

(i) Cover Page. — The electric public utility or electric membership corporation shall attach to the front of an application a cover sheet generally describing:

- a. the measure or program;
  - b. the consideration to be offered;
  - c. the anticipated total cost of the measure or program;
  - d. the source and amount of funding to be used;
- and
- e. the proposed classes of persons to whom it will be offered.

(ii) Description. — The electric public utility or electric membership corporation shall provide a description of each measure and program, and include the following:

- a. the program or measure's objective;
- b. the duration of the program or measure;
- c. the targeted sector and eligibility requirements;
- d. examples of all communication materials to be used with the measure or program and the related cost for each program year;
- e. the estimated number of participants;
- f. the impact that each measure or program is expected to have on the electric public utility or electric membership corporation, its customer body as a whole, and its participating North Carolina customers; and
- g. any other information the electric public utility or electric membership corporation believes is relevant to the application, including information on competition known by the electric public utility or the electric membership corporation.

(iii) Additionally, an electric public utility shall include or describe:

- a. the measure's proposed marketing plan, including a description of market barriers and how the electric public utility intends to address them;
- b. the total market potential and estimated market growth throughout the ~~life of the measure~~ duration of the program;
- c. the estimated summer and winter peak demand reduction by unit metric and in the aggregate by year;
- d. the estimated energy reduction per appropriate unit metric and in the aggregate by year;
- e. the estimated lost energy sales per appropriate unit metric and in the aggregate by year; and
- f. the estimated load shape impacts; and
- ~~g. a description of how the measure's impacts will be evaluated, measured, and verified.~~

(iv) Costs and Benefits. — The electric public utility or electric membership corporation shall provide the following information on the costs and benefits of each proposed measure or program: (a) the estimated total and per unit cost and benefit of the measure or program to the electric public utility or electric membership corporation, reported by type of benefit and expenditure (e.g., capital cost expenditures; administrative costs; operating costs; participation incentives, such as rebates and direct payments; and communications costs, and the costs of measurement and verification) and the planned accounting treatment for those costs and benefits; (b) the type, the maximum and minimum amount of participation incentives to be made to any party, and the reason for any participation incentives and other consideration and to whom they will be offered, including schedules listing participation incentives and other consideration to be offered; and (c) service limitations or conditions planned to be imposed on customers who do not participate in the measure. With respect to communications costs, the electric public utility or electric membership corporation shall provide detailed cost information on communications materials related to each proposed measure or program. Such costs shall be included in the Commission's consideration of the total cost of the measure or program and whether the total cost of the measure or program is reasonable in light of the benefits.

(v) Cost-Effectiveness Evaluation. — The electric public utility or electric membership corporation shall provide the economic justification for each proposed measure or program, including the results of all cost-effectiveness tests. Cost-effectiveness evaluations performed by the electric public utility or electric membership corporation should be based

on direct or quantifiable costs and benefits and should include, at a minimum, an analysis of the Total Resource Cost Test, the Participant Test, the Utility Cost Test, and the Ratepayer Impact Measure Test. In addition, an electric public utility shall describe the methodology used to produce the impact estimates as well as, if appropriate, methodologies considered and rejected in the interim leading to the final model specification.

(vi) Commission Guidelines Regarding Incentive Programs. — The electric public utility or electric membership corporation shall provide the information necessary to comply with the Commission's Revised Guidelines for Resolution of Issues Regarding Incentive Programs, issued by Commission Order on March 27, 1996, in Docket No. M-100, Sub 124, set out as an Appendix to Chapter 8 of these rules.

(vii) Integrated Resource Plan. — When seeking approval of a new demand-side management or new energy efficiency measure, the electric public utility or electric membership corporation shall explain in detail how the measure is consistent with the electric public utility's or electric membership corporation's integrated resource plan filings pursuant to Rule R8-60.

(viii) Other. — Any other information the electric public utility or electric membership corporation believes relevant to the application, including information on competition known by the electric public utility or the electric membership corporation.

(3) Additional Filing Requirements. — In addition to the information listed in subsection (c)(2), an electric public utility filing for approval of a new or modified demand-side management or energy efficiency measure shall provide the following:

(i) Costs and Benefits. — The electric public utility shall describe:

a. any costs incurred or expected to be incurred in adopting and implementing a measure or program to be considered for recovery through the annual rider under G.S. 62-133.9;

b. estimated total costs to be avoided by the measure by appropriate capacity, energy and measure unit metric and in the aggregate by year;

c. estimated participation incentives by appropriate capacity, energy, and measure unit metric and in the aggregate by year;

d. how the electric public utility proposes to allocate the costs and benefits of the measure among the customer classes and jurisdictions it serves;

e. the capitalization period to allow the utility to recover all costs or those portions of the costs associated with a new

program or measure to the extent that those costs are intended to produce future benefits as provided in G.S. 62-133.9(d)(1).

f. The electric public utility shall also include the estimated and known costs of measurement and verification activities pursuant to the Measurement and Verification Reporting Plan described in paragraph (ii).

(ii) Measurement and Verification Reporting Plan for New Demand-Side Management and Energy Efficiency Measures. — The electric public utility shall be responsible for the measurement and verification of energy and peak demand savings and may use the services of an independent third party for such purposes. The costs of implementing the measurement and verification process may be considered as operating costs for purposes of Commission Rule R8-69. In addition, the electric public utility shall:

a. describe the industry-accepted methods to be used to evaluate, measure, verify, and validate the energy and peak demand savings estimated in (2)(iii)c and d above;

b. provide a schedule for reporting the savings to the Commission;

c. describe the methodologies used to produce the impact estimates, as well as, if appropriate, the methodologies it considered and rejected in the interim leading to final model specification; and

d. identify any third party and include all of the costs of that third party, if the electric public utility plans to utilize an independent third party for purposes of measurement and verification.

(iii) Cost recovery mechanism. — The electric public utility shall describe the proposed method of cost recovery from its customers.

(iv) Tariffs or rates. — The electric public utility shall provide proposed tariffs or modifications to existing tariffs that will be required to implement each measure or program.

(v) Utility Incentives. — When seeking approval of new demand-side management and energy efficiency measures, the electric public utility shall indicate whether it will seek to recover any utility incentives, including, if appropriate, net lost revenues, in addition to its costs. If the electric public utility proposes recovery of utility incentives related to the proposed new demand-side management or energy efficiency measure, it shall describe the utility incentives it desires to recover and describe how its measurement and verification reporting plan will demonstrate the results achieved by the proposed measure. If the electric public utility proposes recovery of net lost revenues, it shall describe estimated net lost revenues by appropriate capacity, energy and measure unit metric and in the aggregate by year. If the electric public

utility seeks recovery of utility incentives, including net lost revenues, apart from its recovery of its costs under G.S. 62-133.9, it shall file estimates of the utility incentives and the net lost revenues associated with the proposed measure for each year of the proposed recovery. If the electric public utility seeks only the recovery of net lost revenues apart from its recovery of combined costs and utility incentives, it shall file estimates of net lost revenues for each year of the proposed recovery period.

(d) Procedure.

(1) Automatic Tariff Suspension. – If an electric public utility files a proposed tariff or tariff amendment in connection with an application for approval of a measure or program, the tariff filing shall be automatically suspended pursuant to G.S. 62-134 pending investigation, review, and decision by the Commission.

(2) Service and Response. – The electric public utility or electric membership corporation filing for approval of a measure or program shall serve a copy of its filing on the Public Staff; the Attorney General; the natural gas utilities, electric public utilities, and electric membership corporations operating in the filing electric public utility's or electric membership corporation's certified territory; and any other party that has notified the electric public utility or electric membership corporation in writing that it wishes to be served with copies of all filings. If a party consents, the electric public utility or electric membership corporation may serve it with electronic copies of all filings. Those served, and others learning of the application, shall have thirty (30) days from the date of the filing in which to petition for intervention pursuant to R1-19, file a protest pursuant to Rule R1-6, or file comments on the proposed measure or program. In comments, any party may recommend approval or disapproval of the measure or program or identify any issue relative to the program application that it believes requires further investigation. The filing electric public utility or electric membership corporation shall have the opportunity to respond to the petitions, protests, or comments within ten (10) days of their filing. If any party raises an issue of material fact, the Commission shall set the matter for hearing. The Commission may determine the scope of this hearing.

(3) Notice and Schedule. — If the application is set for hearing, the Commission shall require notice, as it considers appropriate, and shall establish a procedural schedule for prefiled testimony and rebuttal testimony after a discovery period of at least 45 days. Where possible, the hearing shall be held within ninety (90) days from the application filing date.

(e) Scope of Review. — In determining whether to approve in whole or in part a new measure or program or changes to an existing measure or program, the Commission may consider any information it determines to be relevant, including any of the following issues:

(1) Whether the proposed measure or program is in the public interest and benefits the electric public utility's or electric membership corporation's overall customer body;

(2) Whether the proposed measure or program unreasonably discriminates among persons receiving or applying for the same kind and degree of service;

(3) Evidence of consideration or compensation paid by any competitor, regulated or unregulated, of the electric public utility or electric membership corporation to secure the installation or adoption of the use of such competitor's services;

(4) Whether the proposed measure or program promotes unfair or destructive competition or is inconsistent with the public policy of this State as set forth in G.S. 62-2 and G.S. 62-140; and

(5) The impact of the proposed measure or program on peak loads and load factors of the filing electric public utility or electric membership corporation, and whether it encourages energy efficiency.

(f) Cost Recovery for New Measures. – Approval of a program or measure under Commission Rule R8-68 does not constitute approval of rate recovery of the costs of the program or measure. With respect to new demand-side management and energy efficiency measures, the costs of those new measures, approved by application of this rule, that are found to be reasonable and prudently incurred shall be recovered through the annual rider described in G.S. 62-133.9 and Rule R8-69. The Commission may consider in the annual rider proceeding whether to approve the inclusion of any utility incentive pursuant to G.S. 62-133.9(d)(2)a.-c. in the annual rider.

#### **Rule R8-69. COST RECOVERY FOR DEMAND-SIDE MANAGEMENT AND ENERGY EFFICIENCY MEASURES OF ELECTRIC PUBLIC UTILITIES**

(a) Definitions.

(1) Unless listed below, the definitions of all terms used in this rule shall be as set forth in Rules R8-67 and R8-68, or if not defined therein, then as set forth in G.S. 62-133.8(a) and G.S. 62-133.9(a).

(2) "DSM/EE rider" means a charge or rate established by the Commission annually pursuant to G.S. 62-133.9(d) to allow the electric public utility to recover all reasonable and prudent costs incurred in adopting and implementing new demand-side management and energy efficiency measures after August 20, 2007, as well as, if appropriate, utility incentives, including net lost revenues.

(3) "Large commercial customer" means any commercial customer that has an annual energy usage of not less than 1,000,000 kilowatt-hours (kWh), measured in the same manner as the electric public utility that serves the commercial customer measures energy for billing purposes.

(4) "Rate period" means the period during which the DSM/EE rider established under this rule will be in effect. For each electric public utility, this period will be the same as the period during which the rider established under Rule R8-55 is in effect.

(5) "Test period" shall be the same for each public utility as its test period for purposes of Rule R8-55, unless otherwise ordered by the Commission.

(b) Recovery of Costs.

(1) Each year the Commission shall conduct a proceeding for each electric public utility to establish an annual DSM/EE rider. The DSM/EE rider shall consist of a reasonable and appropriate estimate of the expenses expected to be incurred by the electric public utility, during the rate period, for the purpose of adopting and implementing new demand-side management and energy efficiency measures previously approved pursuant to Rule R8-68. The expenses will be further modified through the use of a DSM/EE experience modification factor (DSM/EE EMF) rider. The DSM/EE EMF rider will reflect the difference between the reasonable expenses prudently incurred by the electric public utility during the test period for that purpose and the revenues that were actually realized during the test period under the DSM/EE rider then in effect. Those expenses approved for recovery shall be allocated to the North Carolina retail jurisdiction consistent with the system benefits provided by the new demand-side management and energy efficiency measures and shall be assigned to customer classes in accordance with G.S. 62-133.9(e) and (f).

(2) Upon the request of the electric public utility, the Commission shall also incorporate the experienced over-recovery or under-recovery of costs up to thirty (30) days prior to the date of the hearing in its determination of the DSM/EE EMF rider, provided that the reasonableness and prudence of these costs shall be subject to review in the utility's next annual DSM/EE rider hearing.

(3) Pursuant to G.S. 62-130(e), any over-collection of reasonable and prudently incurred costs to be refunded to an electric public utility's customers through operation of the DSM/EE EMF rider shall include an amount of interest, at such rate as the Commission determines to be just and reasonable, not to exceed the maximum statutory rate. The beginning date for measurement of such interest shall be the effective date of the DSM/EE EMF rider in each annual proceeding, unless otherwise determined by the Commission.

(4) The burden of proof as to whether the costs were reasonably and prudently incurred shall be on the electric public utility.

(5) Any costs incurred for adopting and implementing measures that do not constitute new demand-side management or energy efficiency measures are ineligible for recovery through the annual rider established in G.S. 62-133.9.

(6) Except as provided in (c)(3) of this rule, each electric public utility may implement deferral accounting for costs considered for recovery through the annual rider. At the time the Commission approves a new demand-side management or energy efficiency measure under Rule R8-68, the electric public utility may defer costs of adopting and implementing the new measure in accordance with the Commission's approval order under Rule R8-68. Subject to the Commission's review, the electric public utility may begin deferring the costs of adopting and implementing new demand-side management or energy efficiency measures six (6) months prior to the filing of its application for approval

under Rule R8-68, except that the Commission may consider earlier deferral of development costs in exceptional cases, where such deferral is necessary to develop an energy efficiency measure. Deferral accounting, however, for any administrative costs, general costs, or other costs not directly related to a new demand-side management or energy efficiency measure must be approved prior to deferral. The balance in the deferral account, net of deferred income taxes, may accrue a return at the net-of-tax rate of return approved in the electric public utility's most recent general rate proceeding. The return so calculated will be adjusted in any rider calculation to reflect necessary recoveries of income taxes. This return is not subject to compounding. The accrual of such return of on any under-recovered or over-recovered balance set in an annual proceeding for recovery or refund through a DSM/EE EMF rider shall cease as of the effective date of the DSM/EE EMF rider in that proceeding, unless otherwise determined by the Commission. However, deferral accounting of costs shall not affect the Commission's authority under this rule to determine whether the deferred costs may be recovered.

(c) Utility Incentives.

(1) With respect to a new demand-side management or energy efficiency measure previously approved under Rule R8-68, the electric public utility may, in its annual filing, apply for recovery of any utility incentives, including, if appropriate, net lost revenues, identified in its application for approval of the measure. The Commission shall determine the appropriate ratemaking treatment for any such utility incentives.

(2) When requesting inclusion of a utility incentive in the annual rider, the electric public utility bears the burden of proving its calculations of those utility incentives and the justification for including them in the annual rider, either through its measurement and verification reporting plan or through other relevant evidence.

(3) An electric public utility shall not be permitted to implement deferral accounting or the accrual of a return for utility incentives unless the Commission approves an annual rider that provides for recovery of an integrated amount of costs and utility incentives. In that instance, the Commission shall determine the extent to which deferral accounting and the accrual of a return will be allowed.

(d) Special Provisions for Industrial or Large Commercial Customers.

(1) Pursuant to G.S. 62-133.9(f), any industrial customer or large commercial customer may notify its electric power supplier that: (i) it has implemented or, in accordance with stated, quantifiable goals, will implement alternative demand-side management or energy efficiency measures; and (ii) it elects not to participate in demand-side management or energy efficiency measures for which cost recovery is allowed under G.S. 62-133.9. Any such customer shall be exempt from any annual rider established pursuant to this rule after the date of notification.

(2) At the time the electric public utility petitions for the annual rider, it shall provide the Commission with a list of those industrial or large commercial

customers that have opted out of participation in the new demand-side management or energy efficiency measures. The electric public utility shall also provide the Commission with a listing of industrial or large commercial customers that have elected to participate in new measures after having initially notified the electric public utility that it declined to participate.

(3) Any customer that opts out but subsequently elects to participate in a new demand-side management or energy efficiency measure or program loses the right to be exempt from payment of the rider for five years or the life of the measure or program, whichever is longer. For purposes of this subsection, "life of the measure or program" means the capitalization period approved by the Commission to allow the utility to recover all costs or those portions of the costs associated with a program or measure to the extent that those costs are intended to produce future benefits as provided in G.S. 62-133.9(d)(1).

(e) Annual Proceeding.

(1) For each electric public utility, the Commission shall schedule an annual rider hearing pursuant to G.S. 62-133.9(d) to review the costs incurred by the electric public utility in the adoption and implementation of new demand-side management and energy efficiency measures during the test period, the revenues realized during the test period through the operation of the annual rider, and the costs expected to be incurred during the rate period and shall establish annual DSM/EE and DSM/EE EMF riders to allow the electric public utility to recover all costs found by the Commission to be recoverable. The Commission may also approve, if appropriate, the recovery of utility incentives, including net lost revenues, pursuant to G.S. 62-133.9(d)(2) in the rider.

(2) The annual rider hearing for each electric public utility will be scheduled as soon as practicable after the hearing held by the Commission for the electric public utility under Rule R8-55. Each electric public utility shall file its application for recovery of costs and appropriate utility incentives at the same time that it files the information required by Rule R8-55.

(3) The DSM/EE EMF rider will remain in effect for a fixed 12-month period following establishment and will continue as a rider to rates established in any intervening general rate case proceeding.

(f) Filing Requirements and Procedure.

(1) Each electric public utility shall submit to the Commission all of the following information and data in its application:

(i) Projected North Carolina retail monthly kWh sales for the rate period.

(ii) For each measure for which cost recovery is requested through the DSM/EE rider:

a. total expenses expected to be incurred during the rate period in the aggregate and broken down by type of expenditure, per appropriate capacity, energy and measure unit metric and the proposed jurisdictional allocation factors;

b. total costs that the utility does not expect to incur during the rate period as a direct result of the measure in the aggregate and broken down by type of cost, per appropriate capacity, energy and measure unit metric, and the proposed jurisdictional allocation factors, as well as any changes in the estimated future amounts since last filed with the Commission;

c. a description of the measurement and verification activities to be conducted during the rate period, including their estimated costs;

d. total expected summer and winter peak demand reduction per appropriate measure unit metric and in the aggregate;

e. total expected energy reduction in the aggregate and per appropriate measure unit metric.

(iii) For each measure for which cost recovery is requested through the DSM/EE EMF rider:

a. total expenses for the test period in the aggregate and broken down by type of expenditure, per appropriate capacity, energy and measure unit metric and the proposed jurisdictional allocation factors;

b. total costs that the utility did not incur for the test period as a direct result of the measure in the aggregate and broken down by type of cost, per appropriate capacity, energy and measure unit metric, and the proposed jurisdictional allocation factors, as well as any changes in the estimated future amounts since last filed with the Commission;

c. a description of, the results of, and the costs of all measurement and verification activities conducted in the test period;

d. total summer and winter peak demand reduction in the aggregate and per appropriate measure unit metric, as well as any changes in estimated future amounts since last filed with the Commission;

e. total energy reduction in the aggregate and per appropriate measure unit metric, as well as any changes in the estimated future amounts since last filed with the Commission;

f. a discussion of the findings and the results of the program or measure;

g. evaluations of event-based programs including the date, weather conditions, event trigger, number of customers notified and number of customers enrolled; and

h. a comparison of impact estimates presented in the measure application from the previous year, those used in reporting for previous measure years, and an explanation of significant

differences in the impacts reported and those previously found or used.

(iv) For each measure for which recovery of utility incentives is requested, a detailed explanation of the method proposed for calculating those utility incentives, the actual calculation of the proposed utility incentives, and the proposed method of providing for their recovery and true-up through the annual rider. If recovery of net lost revenues is requested, the total net lost kWh sales and net lost revenues per appropriate capacity, energy, and program unit metric and in the aggregate for the test period, and the proposed jurisdictional allocation factors, as well as any changes in estimated future amounts since last filed with the Commission.

(v) Actual revenues produced by the DSM/EE rider and the DSM/EE EMF rider established by the Commission during the test period and for all available months immediately preceding the rate period.

(vi) The requested DSM/EE rider and DSM/EE EMF rider and the basis for their determination.

(vii) Projected North Carolina retail monthly kWh sales for the rate period for all industrial and large commercial accounts, in the aggregate, that are not assessed the rider charges as provided in this rule.

(viii) All workpapers supporting the calculations and adjustments described above.

(2) Each electric public utility shall file the information required under this rule, accompanied by workpapers and direct testimony and exhibits of expert witnesses supporting the information filed in this proceeding, and any change in rates proposed by the electric public utility, by the date specified in subdivision (e)(2) of this rule. An electric public utility may request a rider lower than that to which its filed information suggests that it is entitled.

(3) The electric public utility shall publish a notice of the annual hearing for two (2) successive weeks in a newspaper or newspapers having general circulation in its service area, normally beginning at least thirty (30) days prior to the hearing, notifying the public of the hearing before the Commission pursuant to G.S. 62-133.9(d) and setting forth the time and the place of the hearing.

(4) Persons having an interest in any hearing may file a petition to intervene at least 15 days prior to the date of the hearing. Petitions to intervene filed less than 15 days prior to the date of the hearing may be allowed in the discretion of the Commission for good cause shown.

(5) The Public Staff and other intervenors shall file direct testimony and exhibits of expert witnesses at least 15 days prior to the hearing date. If a petition to intervene is filed less than 15 days prior to the hearing date, it shall be accompanied by any direct testimony and exhibits of expert witnesses the intervenor intends to offer at the hearing.

(6) The electric public utility may file rebuttal testimony and exhibits of expert witnesses no later than 5 days prior to the hearing date.

**CHAPTER 8.**  
**APPENDIX.**

REVISED GUIDELINES FOR RESOLUTION OF ISSUES  
REGARDING INCENTIVE<sup>1</sup> PROGRAMS

(1) To obtain Commission approval of a residential or commercial program involving incentives per Rule R1-38 [now Rule R6-95 or R8-68], the sponsoring utility must demonstrate that the program is cost effective for its ratepayers.

(a) Maximum incentive payments to any party must be capable of being determined from an examination of the applicable program.

(b) Existing approved programs are grandfathered. However, utilities shall file a listing of existing approved programs subject to these guidelines, including applicable tariff sheets, and amount and type of incentives involved in each program or procedure for calculating such incentives in each program, all within 60 days after approval of these guidelines.

(c) Utilities shall file a description of any new program or of a change in an existing program, including applicable tariff sheets, and amount and type of incentives involved in each program or procedure for calculating such incentives in each program, all at least 30 days prior to changing or introducing the program.

(d) The matter of the relative efficiency of electricity versus natural gas under various scenarios (space heating alone, space heating plus A/C, etc.) cannot now be resolved. A better approach at this time would be to determine the acceptability of incentive programs herein based on the energy efficiency of electricity alone or of natural gas alone, as applicable.

(e) The criteria for determining whether or not to approve an electric program pursuant to G.S. 62-140(c) should not include consideration of the impact of an electric program on the sales of natural gas, or vice versa.

(f) Approval of a program pursuant to Commission Rule R1-38 [now Rule R6-95 or R8-68] does not constitute approval of rate recovery of the costs of the program. The appropriateness of rate recovery shall be evaluated in general rate cases or similar proceedings.

(2) If a program involves an incentive per Rule R1-38 [now Rule R6-95 or R8-68] and the incentive affects the decision to install or adopt natural gas service or electric service in the residential or commercial market, there shall be a rebuttable presumption that the program is promotional in nature.

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<sup>1</sup> All incentives referenced in these Revised Guidelines are participation incentives as now defined in Rule R8-68(b)(7).

(a) If the presumption that a program is promotional is not successfully rebutted, the cost of the incentive may not be recoverable from the ratepayers unless the Commission finds good cause to do so.

(b) If the presumption that a program is promotional is successfully rebutted, the cost of the incentive may be recoverable from the ratepayers. The cost shall not be disallowed in a future proceeding on the grounds that the program is primarily designed to compete with other energy suppliers. The amount of any recovery shall not exceed the difference between the cost of installing equipment and/or constructing a dwelling to current state/federal energy efficiency standards and the more stringent energy efficiency requirements of the program, to the extent found just and reasonable by the Commission.

(c) The presumption that a program is promotional may generally be rebutted at the time it is filed for approval by demonstrating that the incentive will encourage construction of dwellings and installation of appliances that are more energy efficient than required by state and/or federal building codes and appliance standards, subject to Commission approval.

(3) If a program involves an incentive paid to a third party builder (residential or commercial), the builder shall be advised by the sponsoring utility that the builder may receive the incentive on a per structure basis without having to agree to: (1) a minimum number or percentage of all-gas or all-electric structures to be built in a given subdivision development or in total; or (2) the type of any given structure (gas or electric) to be built in a given subdivision development.

(a) Electric and gas utilities may continue to promote and pay incentives for all-electric and all-gas structures respectively, provided such programs are approved by the Commission.

(b) A builder shall be advised by the sponsoring utility of the availability of natural gas or electric alternatives, as appropriate.

(c) A builder receiving incentives shall not be required to advertise that the builder is exclusively an all-gas or all-electric builder for either a particular subdivision or in general.

(4) The promotional literature for any program offering energy-efficiency mortgage discounts shall explain that the structures financed under the program need not be all-electric or all-gas.

(5) Duke's proposed Food Service Program shall be modified to include a definition of qualifying equipment and of conventional equipment, and is subject to approval in accordance with guideline number 1 above.

(a) The nature or amount of incentive contained in each program encouraging the installation of commercial appliances (electric or gas) that use the sponsoring utility's energy product, such as Duke's Food Service Program, shall be unaffected by the availability or use of alternate fuels in the applicable customer's facility.

(b) Commercial clients (builders, customers, etc.) who are offered incentives for installation of appliances shall be advised by the sponsoring utility of the availability of natural gas or electric alternatives, as appropriate.

(6) Rates, rate design issues, and terms and conditions of service approved by the Commission are not subject to these guidelines.

(7) Pending applications involving incentive programs are subject to these guidelines.

**Rule R8-64. APPLICATION FOR CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY BY QUALIFYING COGENERATOR OR SMALL POWER PRODUCER; PROGRESS REPORTS**

(a) Scope of Rule.

(1) This rule applies to applications for a certificate of public convenience and necessity pursuant to G.S. 62-110.1(a) filed by any person seeking the benefits of 16 U.S.C. 824a-3 or G.S. 62-156 as a qualifying cogenerator or a qualifying small power producer as defined in 16 U.S.C. 796(17) and (18) or as a small power producer as defined in G.S. 62-3(27a), except persons exempt from certification by the provisions of G.S. 62-110.1(g).

(2) For purposes of this rule, the term “person” shall include a municipality as defined in Rules R7-2(c) and R10-2(c), including a county of the State.

(3) The construction of a facility for the generation of electricity shall include not only the building of a new building, structure or generator, but also the renovation or reworking of an existing building, structure or generator in order to enable it to operate as a generating facility.

(4) This rule shall apply to any person within its scope who begins construction of an electric generating facility without first obtaining a certificate of public convenience and necessity. In such circumstances, the application shall include an explanation for the applicant’s beginning of construction before the obtaining of the certificate.

(b) The Application.

(1) The application shall be accompanied by maps, plans, and specifications setting forth such details and dimensions as the Commission requires. It shall contain, among other things, the following information, either embodied in the application or attached thereto as exhibits:

(i) The full and correct name, business address, business telephone number, and electronic mailing address of the facility owner;

(ii) A statement of whether the facility owner is an individual, a partnership, or a corporation and, if a partnership, the name and business address of each general partner and, if a corporation, the state and date of incorporation and the name, business address, business telephone number, and electronic mailing address of an individual duly authorized to act as corporate agent for the purpose of the application and, if a foreign corporation, whether domesticated in North Carolina;

(iii) The nature of the generating facility, including the type and source of its power or fuel;

(iv) The location of the generating facility set forth in terms of local highways, streets, rivers, streams, or other generally known local landmarks together with a map, such as a county road map, with the location indicated on the map;

(v) The ownership of the site and, if the owner is other than the applicant, the applicant's interest in the site;

(vi) A description of the buildings, structures and equipment comprising the generating facility and the manner of its operation;

(vii) The projected maximum dependable capacity of the facility in megawatts;

(viii) The projected cost of the facility;

(ix) The projected date on which the facility will come on line;

(x) The applicant's general plan for sale of the electricity to be generated, including the utility to which the applicant plans to sell the electricity; any provisions for wheeling of the electricity; arrangements for firm, non-firm or emergency generation; the service life of the project; the projected annual sales in kilowatt-hours; whether the applicant intends to produce renewable energy certificates that are eligible for compliance with the State's renewable energy and energy efficiency portfolio standard; and

(xi) A complete list of all federal and state licenses, permits and exemptions required for construction and operation of the generating facility and a statement of whether each has been obtained or applied for. A copy of those that have been obtained should be filed with the application; a copy of those that have not been obtained at the time of the application should be filed with the Commission as soon as they are obtained.

(2) In addition to the information required above, an applicant who desires to enter into a contract for a term of 5 years or more for the sale of electricity and who will have a projected dependable capacity of 5 megawatts or more available for such sale shall include in the application the following information and exhibits:

(i) A statement detailing the experience and expertise of the persons who will develop, design, construct and operate the project to the extent such persons are known at the time of the application;

(ii) Information specifically identifying the extent to which any regulated utility will be involved in the actual operation of the project;

(iii) A statement obtained by the applicant from the electric utility to which the applicant plans to sell the electricity to be generated setting forth an assessment of the impact of such purchased power on the utility's capacity, reserves, generation mix, capacity expansion plan, and avoided costs;

(iv) The most current available balance sheet of the applicant;

(v) The most current available income statement of the applicant;

(vi) An economic feasibility study of the project;

(vii) A statement of the actual financing arrangements entered into in connection with the project to the extent known at the time of the application;

(viii) A detailed explanation of the anticipated kilowatt and kilowatt-hour outputs, on-peak and off-peak, for each month of the year;

(ix) A detailed explanation of all energy inputs and outputs, of whatever form, for the project, including the amount of energy and the form of energy to be sold to each purchaser; and

(x) A detailed explanation of arrangements for fuel supply, including the length of time covered by the arrangements, to the extent known at the time of the application.

(3) All applications shall be signed and verified by the applicant or by an individual duly authorized to act on behalf of the applicant for the purpose of the application.

(4) Applications filed on behalf of a corporation are not subject to the provision of R1-5(d) that requires corporate pleadings to be filed by a member of the Bar of the State of North Carolina. Should a public hearing be required, the requirements of G.S. 84-4 and G.S. 84-4.1 shall be applicable.

(5) Falsification of or failure to disclose any required information in the application may be grounds for denying or revoking any certificate.

(6) The application and 15 copies shall be filed with the Chief Clerk of the Utilities Commission.

(c) Procedure upon receipt of Application. — Upon the filing of an application appearing to meet the requirements set forth above, the Commission will process it as follows:

(1) The Commission will issue an order requiring the applicant to publish notice of the application once a week for four successive weeks in a daily newspaper of general circulation in the county where the generating facility is proposed to be constructed and requiring the applicant to mail a copy of the application and the notice, no later than the first date that such notice is published, to the electric utility to which the applicant plans to sell the electricity to be generated. The applicant shall be responsible for filing with the Commission an affidavit of publication and a signed and verified certificate of service to the effect that the application and notice have been mailed to the electric utility to which the applicant plans to sell the electricity to be generated.

(2) The Chief Clerk will deliver 2 copies of the application and the notice to the Clearinghouse Coordinator of the Office of Policy and Planning of the Department of Administration for distribution by the Coordinator to State agencies having an interest in the application.

(3) If a complaint is received within 10 days after the last date of the publication of the notice, the Commission will schedule a public hearing to determine whether a certificate should be awarded and will give reasonable notice of the time and place of the hearing to the applicant and to each

complaining party and will require the applicant to publish notice of the hearing in the newspaper in which the notice of the application was published. If no complaint is received within the time specified, the Commission may, upon its own initiative, order and schedule a hearing to determine whether a certificate should be awarded and, if the Commission orders a hearing upon its own initiative, it will require notice of the hearing to be published by the applicant in the newspaper in which the notice of the application was published.

(4) If no complaint is received within the time specified and the Commission does not order a hearing upon its own initiative, the Commission will enter an order awarding the certificate.

(d) The Certificate.

(1) The certificate shall be subject to revocation if any of the other federal or state licenses, permits or exemptions required for construction and operation of the generating facility is not obtained and that fact is brought to the attention of the Commission and the Commission finds that as a result the public convenience and necessity no longer requires, or will require, construction of the facility.

(2) The certificate must be renewed by re-compliance with the requirements set forth in this Rule if the applicant does not begin construction within 5 years after issuance of the certificate.

(3) Both before the time construction is completed and after, all certificate holders must advise both the Commission and the utility involved of any plans to sell, transfer, or assign the certificate or the generating facility or of any significant changes in the information set forth in subsection (b)(1) of this Rule, and the Commission will order such proceedings as it deems appropriate to deal with such plans or changes.

(e) Reporting. — All applicants must submit annual progress reports until construction is completed.

#### **Rule R8-65. REPORT BY PERSONS CONSTRUCTING ELECTRIC GENERATING FACILITIES EXEMPT FROM CERTIFICATION REQUIREMENT**

(a) All persons exempt from certification under G.S. 62-110.1(g) shall file with the Commission a report of the proposed construction of an electric generating facility before beginning construction of the facility. The report of proposed construction shall include the information prescribed in subsection (b)(1) of Rule R8-64 and shall be signed and verified by the owner of the electric generating facility or by an individual duly authorized to act on behalf of the owner for the purpose of the filing.

(b) Reports filed on behalf of a corporation are not subject to the provision of Rule R1-5(d) that requires corporate pleadings to be filed by a member of the Bar of the State of North Carolina. Should a public hearing be required, the requirements of G.S. 84-4 and G.S. 84-4.1 shall be applicable.

(c) The owner of the electric generating facility shall provide a copy of the report of proposed construction to the electric public utility, electric membership corporation, or municipality to which the generating facility will be interconnected.

(d) The owner of the electric generating facility shall file an original and 15 copies of the report of proposed construction with the Chief Clerk of the Utilities Commission. No filing fee is required.

(e) Upon the filing of a report of proposed construction, the Chief Clerk will assign a new docket or sub-docket number to the filing and will deliver 2 copies of the report of proposed construction to the Clearinghouse Coordinator of the Office of Policy and Planning of the Department of Administration for distribution by the Coordinator to State agencies having an interest for information only.

(f) The Commission may order a hearing on the report of proposed construction upon its own motion or upon receipt of a complaint specifying the basis thereof. Otherwise, no acknowledgment of receipt of the report of proposed construction will be issued nor will any other further action be taken by the Commission.

#### **Rule R8-66. REGISTRATION OF RENEWABLE ENERGY FACILITIES; ANNUAL REPORTING REQUIREMENTS**

(a) The following terms shall be defined as provided in G.S. 62-133.8: “electric power supplier”; “renewable energy certificate”; and “renewable energy facility.”

(b) The owner, including an electric power supplier, of each renewable energy facility, whether or not required to obtain a certificate of public convenience and necessity pursuant to G.S. 62-110.1, that intends for renewable energy certificates it earns to be eligible for use by an electric power supplier to comply with G.S. 62-133.8 shall register the facility with the Commission. The registration statement may be filed separately or together with an application for a certificate of public convenience and necessity, or with a report of proposed construction by a person exempt from the certification requirement. All relevant renewable energy facilities shall be registered prior to their having RECs issued in the North Carolina Renewable Energy Tracking System (NC-RETS) pursuant to Rule R8-67(h). Contracts for power supplied by an agency of the federal government are exempt from the requirement to register and file annually with the Commission if the renewable energy certificates associated with the power are bundled with the power purchased by the electric power supplier.

(1) The owner of each renewable energy facility that has not previously done so, including a facility that is located outside of the State of North Carolina, shall include in its registration statement the following information:

(i) The full and correct name, business address, electronic mailing address, and telephone number of the facility owner;

(ii) A statement of whether the facility owner is an individual, a partnership, or a corporation and, if a partnership, the name and business address of each general partner and, if a corporation, the state and date of incorporation and the name, business telephone number, electronic mailing address, and business address, of an individual duly authorized to

act as corporate agent for the purpose of the application and, if a foreign corporation, whether domesticated in North Carolina;

(iii) The nature of the renewable energy facility, including its technology, the type and source of its power or fuel(s); whether it produces electricity, useful thermal energy, or both; and the facility's projected dependable capacity in megawatts AC and/or British thermal units, as well as its maximum nameplate capacity;

(iv) The location of the facility set forth in terms of local highways, streets, rivers, streams, or other generally known local landmarks together with a map, such as a county road map, with the location indicated on the map;

(v) The ownership of the site and, if the site owner is other than the facility owner, the facility owner's interest in the site;

(vi) A complete list of all federal and state licenses, permits, and exemptions required for construction and operation of the facility, and a statement of whether each has been obtained or applied for. A copy of those that have been obtained should be filed with the application. Wind facilities with multiple turbines, where each turbine is licensed separately, may provide copies of such approvals for one such turbine of each type in the facility, but shall attest that approvals for all of the turbines are available for inspection;

(vii) The date the facility began operating. If the facility is not yet operating, the owner shall provide the facility's projected in-service date;

(viii) If the facility is already operating, the owner shall provide information regarding the amount of energy produced by the facility, net of station use, for the most recent 12-month or calendar-year period. Energy production data for a shorter time period is acceptable for facilities that have not yet operated for a full year;

(ix) The name of the entity that does (or will) read the facility's energy production meter(s) for the purpose of renewable energy certificate issuance; and

(x) Whether the facility participates in a REC tracking system, and if so, which one. If the facility does not currently participate in a REC tracking system, which tracking system the owner anticipates will be used for the purpose of REC issuance.

(2) The owner of each renewable energy facility shall certify in its registration statement and annually thereafter that it is in substantial compliance with all federal and state laws, regulations, and rules for the protection of the environment and conservation of natural resources. If a credible showing is made that the facility is not in substantial compliance with all federal and state laws, regulations, and rules for the protection of the environment and conservation of natural resources, the Commission shall refer the matter to the appropriate environmental agency for review. Registration shall not be revoked unless and

until the appropriate environmental agency concludes that the facility is out of compliance and the Commission issues an order revoking the registration.

(3) The owner of each renewable energy facility shall certify in its registration statement and annually thereafter that the facility satisfies the requirements of G.S. 62-133.8(a)(5) or (7) as a renewable energy facility or new renewable energy facility, that the facility will be operated as a renewable energy facility or new renewable energy facility, and, if the facility has been placed into service, the date when it was placed into service.

(4) The owner of each renewable energy facility shall further certify in its registration statement and annually thereafter that any renewable energy certificates (whether or not bundled with electric power) sold to an electric power supplier to comply with G.S. 62-133.8 have not, and will not, be remarketed or otherwise resold for any other purpose, including another renewable energy portfolio standard or voluntary purchase of renewable energy certificates in North Carolina (such as NC GreenPower) or any other state or country, and that the electric power associated with the certificates will not be offered or sold with any representation that the power is bundled with renewable energy certificates.

(5) The owner of each renewable energy facility shall certify in its registration statement and annually thereafter that it consents to the auditing of its books and records by the Public Staff insofar as those records relate to transactions with North Carolina electric power suppliers, and agrees to provide the Public Staff and the Commission access to its books and records, wherever they are located, and to the facility.

(6) If the facility is already operating, the owner shall attest that the registration information is true and accurate for all years that the facility has earned RECs for compliance with G.S. 62-133.8. Each registration statement shall be signed and verified by the owner of the renewable energy facility or by an individual duly authorized to act on behalf of the owner for the purpose of the filing.

(7) Renewable energy facilities and new renewable energy facilities that have RECs issued in NC-RETS shall provide their annual certification electronically via NC-RETS. Annual certifications are due April 1 each year.

(8) Registration statements filed on behalf of a corporation are not subject to the provision of Rule R1-5(d) that requires corporate pleadings to be filed by a member of the Bar of the State of North Carolina. Should a public hearing be required, the requirements of G.S. 84-4 and G.S. 84-4.1 shall be applicable.

(9) An original and 15 copies of the registration statement shall be filed with the Chief Clerk of the Utilities Commission. No filing fee is required to be submitted with the registration statement.

(c) Each re-seller of renewable energy certificates derived from a renewable energy facility, including a facility that is located outside of the State of North Carolina, shall ensure that the owner of the renewable energy facility registers with the Commission prior to the sale of the certificates by the re-seller to an electric power

supplier to comply with G.S. 62-133.8(b), (c), (d), (e) and (f), except that the filing requirements in subsection (b) of this Rule shall apply only to information for the year(s) corresponding to the year(s) in which the certificates to be sold were earned.

(d) Upon receipt of a registration statement, the Chief Clerk will assign a new docket or sub-docket number to the filing. The Chief Clerk will deliver 2 copies of the registration statement to the Clearinghouse Coordinator of the Office of Policy and Planning of the Department of Administration for distribution by the Coordinator to State agencies having an interest in the filing for information only.

(e) No later than ten (10) business days after the registration statement is filed with the Commission, the Public Staff shall, and any other interested persons may, file with the Commission and serve upon the registrant a recommendation regarding whether the registration statement is complete and identifying any deficiencies. If the Commission determines that the registration statement is not complete, the owner of the renewable energy facility will be required to file the missing information. Upon receipt of all required information, the Commission will promptly issue an order accepting the registration, denying the registration, or setting the matter for hearing.

(f) Any of the following actions may result in revocation of registration by the Commission:

(1) Falsification of or failure to disclose any required information in the registration statement or annual filing;

(2) Failure to remain in substantial compliance with all federal and state laws, regulations, and rules for the protection of the environment and conservation of natural resources;

(3) Remarketing or reselling any renewable energy certificate (whether or not bundled with electric power) after it has been sold to an electric power supplier or any other person for compliance with G.S. 62-133.8 or for any other purpose, including another renewable energy portfolio standard or voluntary purchase of renewable energy certificates in North Carolina or any other state or country, or offering or selling the electric power associated with the certificates with any representation that the power is bundled with renewable energy certificates;

(4) Failure to allow the Commission or the Public Staff access to its books and records necessary to audit REPS compliance; or

(5) Failure to provide the annual certifications required by Rule R8-66(b).

(g) NC-RETS shall maintain on its website a list of all registration statement revocations.

(h) An owner of a renewable energy facility that has registered with the Commission shall notify the Commission and the tracking system that issues the facility's RECs within fifteen (15) days of any material change in status, including ownership change, fuel change, or permit issuance or revocation. An owner of a renewable energy facility shall also notify the Commission if it wants to withdraw its registration.

**Rule R8-67. RENEWABLE ENERGY AND ENERGY EFFICIENCY PORTFOLIO STANDARD (REPS)**

## (a) Definitions.

(1) The following terms shall be defined as provided in G.S. 62-133.8: “Combined heat and power system”; “demand-side management”; “electric power supplier”; “new renewable energy facility”; “renewable energy certificate”; “renewable energy facility”; “renewable energy resource”; and “incremental costs.”

(2) For purposes of determining an electric power supplier’s avoided costs, “avoided cost rates” mean an electric power supplier’s most recently approved or established avoided cost rates in this state, as of the date the contract is executed, for purchases of electricity from qualifying facilities pursuant to Section 210 of the Public Utility Regulatory Policies Act of 1978. If the Commission has approved an avoided cost rate for the electric power supplier for the year when the contract is executed, applicable to contracts of the same nature and duration as the contract between the electric power supplier and the seller, that rate shall be used as the avoided cost. Therefore, for example, for a contract by an electric public utility with a term of 15 years, the avoided cost rate applicable to that contract would be the comparable, Commission-approved, 15-year, long-term, levelized rate in effect at the time the contract was executed. In all other cases, the avoided cost shall be a good faith estimate of the electric power supplier’s avoided cost, levelized over the duration of the contract, determined as of the date the contract is executed, taking into consideration the avoided cost rates then in effect as established by the Commission. In any event, when found by the Commission to be appropriate and in the public interest, a good faith estimate of an electric public utility’s avoided cost, levelized over the duration of the contract, determined as of the date the contract is executed, may be used in a particular REPS cost recovery proceeding. Determinations of avoided costs, including estimates thereof, shall be subject to continuing Commission oversight and, if necessary, modification should circumstances so require.

(3) “Energy efficiency measure” means an equipment, physical, or program change that when implemented results in less use of energy to perform the same function or provide the same level of service. “Energy efficiency measure” does not include demand-side management. It includes energy produced from a combined heat and power system that uses nonrenewable resources to the extent the system:

- (i) Uses waste heat to produce electricity or useful, measurable thermal or mechanical energy at a retail electric customer’s facility; and
- (ii) Results in less energy used to perform the same function or provide the same level of service at a retail electric customer’s facility.

(4) “Year-end number of customer accounts” means the number of accounts within each customer class as of December 31 for a given calendar

year determined in a manner approved by the Commission pursuant to subsection (c)(4) or determined in the same manner as that information is reported to the Energy Information Administration, United States Department of Energy, for annual electric sales and revenue reporting.

(5) “Utility compliance aggregator” is an organization that assists an electric power supplier in demonstrating its compliance with REPS. Such demonstration may include, among other things, filing REPS compliance plans or reports and participating in NC-RETS on behalf of the electric power supplier or a group of electric power suppliers.

(b) REPS compliance plan.

(1) Each year, beginning in 2008, each electric power supplier or its designated utility compliance aggregator, shall file with the Commission the electric power supplier’s plan for complying with G.S. 62-133.8(b), (c), (d), (e) and (f). The plan shall cover the calendar year in which the plan is filed and the immediately subsequent two calendar years. At a minimum, the plan shall include the following information:

(i) a specific description of the electric power supplier’s planned actions to comply with G.S. 62-133.8(b), (c), (d), (e) and (f) for each year;

(ii) a list of executed contracts to purchase renewable energy certificates (whether or not bundled with electric power), including type of renewable energy resource, expected MWh, and contract duration;

(iii) a list of planned or implemented energy efficiency measures, including a brief description of the measure and projected impacts;

(iv) the projected North Carolina retail sales and year-end number of customer accounts by customer class for each year;

(v) the current and projected avoided cost rates for each year;

(vi) the projected total and incremental costs anticipated to implement the compliance plan for each year;

(vii) a comparison of projected costs to the annual cost caps for each year;

(viii) for electric public utilities, an estimate of the amount of the REPS rider and the impact on the cost of fuel and fuel-related costs rider necessary to fully recover the projected costs; and

(ix) to the extent not already filed with the Commission, the electric power supplier shall, on or before September 1 of each year, file a renewable energy facility registration statement pursuant to Rule R8-66 for any facility it owns and upon which it is relying as a source of power or RECs in its REPS compliance plan.

(2) Each electric power supplier shall file its REPS compliance plan with the Commission on or before September 1 of each year.

(3) Any electric power supplier subject to Rule R8-60 shall file its REPS compliance plan as part of its integrated resource plan filing, and the

REPS compliance plan will be reviewed and approved pursuant to Rule R8-60. Approval of the REPS compliance plan as part of the integrated resource plan shall not constitute an approval of the recovery of costs associated with REPS compliance or a determination that the electric power supplier has complied with G.S. 62-133.8(b), (c), (d), (e), and (f).

(4) An REPS compliance plan filed by an electric power supplier not subject to Rule R8-60 shall be for information only.

(c) REPS compliance report.

(1) Each year, beginning in 2009, each electric power supplier or its designated utility compliance aggregator shall file with the Commission a report describing the electric power supplier's compliance with the requirements of G.S. 62-133.8(b), (c), (d), (e) and (f) during the previous calendar year. The report shall include all of the following information, including supporting documentation:

(i) the sources, amounts, and costs of renewable energy certificates, by source, used to comply with G.S. 62-133.8(b), (c), (d), (e) and (f). Renewable energy certificates for energy efficiency may be based on estimates of reduced energy consumption through the implementation of energy efficiency measures, to the extent approved by the Commission;

(ii) the actual North Carolina retail sales and year-end number of customer accounts by customer class;

(iii) the current avoided cost rates and the avoided cost rates applicable to energy received pursuant to long-term power purchase agreements;

(iv) the actual total and incremental costs incurred during the calendar year to comply with G.S. 62-133.8(b), (c), (d), (e) and (f);

(v) a comparison of the actual incremental costs incurred during the calendar year to the per-account annual charges (in G.S. 62-133.8(g)(4)) applied to its total number of customer accounts as of December 31 of the previous calendar year;

(vi) the status of compliance with the requirements of G.S. 62-133.8(b), (c), (d), (e) and (f);

(vii) the identification of any renewable energy certificates or energy savings to be carried forward pursuant to G.S. 62-133.8(b)(2)f or (c)(2)f;

(viii) the dates and amounts of all payments made for renewable energy certificates; and

(ix) for electric membership corporations and municipal electric suppliers, reduced energy consumption achieved after January 1, 2008, through the implementation of a demand-side management program.

(2) Each electric public utility shall file its annual REPS compliance report, together with direct testimony and exhibits of expert witnesses, on the same date that it files (1) its cost recovery request under Rule R8-67(e), and

(2) the information required by Rule R8-55. The Commission shall consider each electric public utility's REPS compliance report at the hearing provided for in subsection (e) of this rule and shall determine whether the electric public utility has complied with G.S. 62-133.8(b), (d), (e) and (f). Public notice and deadlines for intervention and filing of additional direct and rebuttal testimony and exhibits shall be as provided for in subsection (e) of this rule.

(3) Each electric membership corporation and municipal electric supplier or their designated utility compliance aggregator shall file a verified REPS compliance report on or before September 1 of each year. The Commission may issue an order scheduling a hearing to consider the REPS compliance report filed by each electric membership corporation or municipal electric supplier, requiring public notice, and establishing deadlines for intervention and the filing of direct and rebuttal testimony and exhibits.

(4) In each electric power supplier's initial REPS compliance report, the electric power supplier shall propose a methodology for determining its cap on incremental costs incurred to comply with G.S. 62-133.8(b), (c), (d), (e) and (f) and fund research as provided in G.S. 62-133.8(h)(1), including a determination of year-end number of customer accounts. The proposed methodology may be specific to each electric power supplier, shall be based upon a fair and reasonable allocation of costs, and shall be consistent with G.S. 62-133.8(h). The electric power supplier may propose a different methodology that meets the above requirements in a subsequent REPS compliance report filing. For electric public utilities, this methodology shall also be used for assessing the per-account charges pursuant to G.S. 62-133.8(h)(5).

(5) In any year, an electric power supplier or other interested party may petition the Commission to modify or delay the provisions of G.S. 62-133.8(b), (c), (d), (e) and (f), in whole or in part. The Commission may grant such petition upon a finding that it is in the public interest to do so. If an electric power supplier is the petitioner, it shall demonstrate that it has made a reasonable effort to meet the requirements of such provisions. Retroactive modification or delay of the provisions of G.S. 62-133.8(b), (c), (d), (e) or (f) shall not be permitted. The Commission shall allow a modification or delay only with respect to the electric power supplier or group of electric power suppliers for which a need for a modification or delay has been demonstrated.

(6) A group of electric power suppliers may aggregate their REPS obligations and compliance efforts provided that all suppliers in the group are subject to the same REPS obligations and compliance methods as stated in either G.S. 133.8(b) or (c). If such a group of electric power suppliers fails to meet its REPS obligations, the Commission shall find and conclude that each supplier in the group, individually, has failed to meet its REPS obligations.

(d) Renewable energy certificates.

(1) Renewable energy certificates (whether or not bundled with electric power) claimed by an electric power supplier to comply with G.S. 62-133.8(b), (c), (d), (e) and (f) must have been earned after January 1, 2008; must have been purchased by the electric power supplier within three years of the date they

were earned; shall be retired when used for compliance; and shall not be used for any other purpose. A renewable energy certificate may be used to comply with G.S. 62-133.8(b), (c), (d), (e) and (f) in the year in which it is acquired or obtained by an electric power supplier or in any subsequent year; provided, however, that an electric public utility must use a renewable energy certificate to comply with G.S. 62-133.8(b), (d), (e) and (f) within seven years of cost recovery pursuant to subsection (e)(10) of this Rule.

(2) For any facility that uses both renewable energy resources and nonrenewable energy resources to produce energy, the facility shall earn renewable energy certificates based only upon the energy derived from renewable energy resources in proportion to the relative energy content of the fuels used.

(3) Renewable energy certificates earned by a renewable energy facility after the date the facility's registration is revoked by the Commission shall not be used to comply with G.S. 62-133.8(b), (c), (d), (e) and (f).

(4) Renewable energy certificates must be issued by, or imported into, the renewable energy certificate tracking system established in Rule R8-67(h) in order to be eligible RECs under G.S. 62-133.8.

(e) Cost recovery.

(1) For each electric public utility, the Commission shall schedule an annual public hearing pursuant to G.S. 62-133.8(h) to review the costs incurred by the electric public utility to comply with G.S. 62-133.8(b), (d), (e) and (f). The annual rider hearing for each electric public utility will be scheduled as soon as practicable after the hearing held by the Commission for the electric public utility under Rule R8-55.

(2) The Commission shall permit each electric public utility to charge an increment or decrement as a rider to its rates to recover in a timely manner the reasonable incremental costs prudently incurred to comply with G.S. 62-133.8(b), (d), (e) and (f). The cost of an unbundled renewable energy certificate, to the extent that it is reasonable and prudently incurred, is an incremental cost and has no avoided cost component.

(3) Unless otherwise ordered by the Commission, the test period for each electric public utility shall be the same as its test period for purposes of Rule R8-55.

(4) Rates set pursuant to this section shall be recovered during a fixed cost recovery period that shall coincide, to the extent practical, with the recovery period for the cost of fuel and fuel-related cost rider established pursuant to Rule R8-55.

(5) The incremental costs will be further modified through the use of an REPS experience modification factor (REPS EMF) rider. The REPS EMF rider will reflect the difference between reasonable and prudently incurred incremental costs and the revenues that were actually realized during the test period under the REPS rider then in effect. Upon request of the electric public utility, the Commission shall also incorporate in this determination the experienced

over-recovery or under-recovery of the incremental costs up to thirty (30) days prior to the date of the hearing, provided that the reasonableness and prudence of these costs shall be subject to review in the utility's next annual REPS cost recovery hearing.

(6) The REPS EMF rider will remain in effect for a fixed 12-month period following establishment and will carry through as a rider to rates established in any intervening general rate case proceedings.

(7) Pursuant to G.S. 62-130(e), any over-collection of reasonable and prudently incurred incremental costs to be refunded to a utility's customers through operation of the REPS EMF rider shall include an amount of interest, at such rate as the Commission determines to be just and reasonable, not to exceed the maximum statutory rate.

(8) Each electric public utility shall follow deferred accounting with respect to the difference between actual reasonable and prudently-incurred incremental costs and related revenues realized under rates in effect.

(9) The incremental costs to be recovered by an electric public utility in any cost recovery period from its North Carolina retail customers to comply with G.S. 62-133.8(b), (d), (e), and (f) shall not exceed the per-account charges set forth in G.S. 62-133.8(h)(4) applied to the electric public utility's year-end number of customer accounts determined as of December 31 of the previous calendar year. These annual charges shall be collected through fixed monthly charges. Each electric public utility shall ensure that the incremental costs recovered under the REPS rider and REPS EMF rider during the cost recovery period, inclusive of gross receipts tax and the regulatory fee, from any given customer account do not exceed the applicable per-account charges set forth in G.S. 62-133.8(h)(4).

(10) Incremental costs incurred during a calendar year toward a current or future year's REPS obligation may be recovered by an electric public utility in any 12-month recovery period up to and including the 12-month recovery period in which the RECs associated with any incremental costs are retired toward the prior year's REPS obligation, as long as the electric public utility's charges to customers do not exceed, in any 12-month period, the per-account annual charges provided in G.S. 62-133.8(h)(4). A renewable energy certificate must be used for compliance and retired within seven years of the year in which the electric public utility recovers the related costs from customers. An electric public utility shall refund to customers with interest the costs for renewable energy certificates that are not used for compliance within seven years.

(11) Each electric public utility, at a minimum, shall submit to the Commission for purposes of investigation and hearing the information required for the REPS compliance report for the 12-month test period established in subsection (3) normalized, as appropriate, consistent with Rule R8-55, accompanied by supporting workpapers and direct testimony and exhibits of expert witnesses, and any change in rates proposed by the electric public utility at the same time that it files the information required by Rule R8-55.

(12) The electric public utility shall publish a notice of the annual hearing for two (2) successive weeks in a newspaper or newspapers having general circulation in its service area, normally beginning at least 30 days prior to the hearing, notifying the public of the hearing before the Commission pursuant to G.S. 62-133.8(h) and setting forth the time and place of the hearing.

(13) Persons having an interest in said hearing may file a petition to intervene setting forth such interest at least 15 days prior to the date of the hearing. Petitions to intervene filed less than 15 days prior to the date of the hearing may be allowed in the discretion of the Commission for good cause shown.

(14) The Public Staff and other intervenors shall file direct testimony and exhibits of expert witnesses at least 15 days prior to the hearing date. If a petition to intervene is filed less than 15 days prior to the hearing date, it shall be accompanied by any direct testimony and exhibits of expert witnesses the intervenor intends to offer at the hearing.

(15) The electric public utility may file rebuttal testimony and exhibits of expert witnesses no later than 5 days prior to the hearing date.

(16) The burden of proof as to whether the costs were reasonable and prudently incurred shall be on the electric public utility.

(f) Contracts with owners of renewable energy facilities.

(1) The terms of any contract entered into between an electric power supplier and a new solar electric facility or new metered solar thermal energy facility shall be of sufficient length to stimulate development of solar energy.

(2) Each electric power supplier shall include appropriate language in all agreements for the purchase of renewable energy certificates (whether or not bundled with electric power) prohibiting the seller from remarketing the renewable energy certificates being purchased by the electric power supplier.

(g) Metering of renewable energy facilities.

(1) Except as provided below, for the purpose of receiving renewable energy certificate issuance in NC-RETS, the electric power generated by a renewable energy facility shall be measured by an electric meter supplied by and read by an electric power supplier. Facilities whose renewable energy certificates are issued in a tracking system other than NC-RETS shall be subject to the requirements of the applicable state commission and/or tracking system.

(2) The electric power generated by an inverter-based solar photovoltaic (PV) system with a nameplate capacity of 10 kW or less may be estimated using generally accepted analytical tools.

(3) The electric power generated by a renewable energy facility interconnected on the customer's side of the utility meter at a customer's location may be measured by (1) an ANSI-certified electric meter not provided by an electric power supplier provided that the owner of the meter complies with the meter testing requirements of Rule R8-13, or (2) another industry-accepted, auditable and accurate metering, controls, and verification system. The data

provided by such meter or system may be read and self-reported by the owner of the renewable energy facility, subject to audit by the Public Staff. The owner of the meter shall retain for audit for 10 years the energy output data.

(4) Thermal energy produced by a combined heat and power system or solar thermal energy facility shall be the thermal energy recovered and used for useful purposes other than electric power production. The useful thermal energy may be measured by meter, or if that is not practicable, by other industry-accepted means that show what measurable amount of useful thermal energy the system or facility is designed and operated to produce and use. Renewable energy certificates shall be earned based on one certificate for every 3,412,000 British thermal units (Btu) of useful thermal energy produced. Meter devices, if used, shall be located so as to measure the actual thermal energy consumed by the load served by the facility. Thermal energy output that is used as station power or to process the facility's fuel is not eligible for RECs. Thermal energy production data, whether metered or estimated, shall be retained for audit for 10 years.

(h) North Carolina Renewable Energy Certificate Tracking System (NC-RETS)

(1) Definitions

(i) "Balancing area operator" means an electric power supplier that has the responsibility to act as the balancing authority for a portion of the regional transmission grid, including maintaining the load-to-generation balance, accounting for energy delivered into and exported out of the area, and supporting interconnection frequency in real time.

(ii) "Multi-fuel facility" means a renewable energy facility that produces energy using more than one fuel type, potentially relying on a fuel that does not qualify for REC issuance in North Carolina.

(iii) "Participant" means a person or organization that opens an account in NC-RETS.

(iv) "Qualifying thermal energy output" is the useful thermal energy: (1) that is made available to an industrial or commercial process (net of any heat contained in condensate return and/or makeup water); (2) that is used in a heating application (e.g., space heating, domestic hot water heating); or (3) that is used in a space cooling application (i.e., thermal energy used by an absorption chiller).

(2) A renewable energy certificate (REC) tracking system, to be known as NC-RETS, is established by the Commission. NC-RETS shall issue, track, transfer and retire RECs. It shall calculate each electric power supplier's REPS obligation and report each electric power supplier's REPS accomplishments, consistent with the compliance report filed under Rule R8-67(c). NC-RETS shall be administered by a third-party vendor selected by the Commission. Only RECs issued by or imported into NC-RETS are qualifying RECs under G.S. 62-133.8.

(3) Each electric power supplier shall be a participant in NC-RETS and shall provide data to NC-RETS to calculate its REPS obligation and to

demonstrate its compliance with G.S. 62-133.8. An electric power supplier may select a utility compliance aggregator to participate in NC-RETS on its behalf and file REPS compliance plans and compliance reports, but the supplier shall nonetheless remain responsible for its own compliance. For reporting purposes, an electric power supplier or its utility compliance aggregator may aggregate the supplier's compliance obligations and accomplishments with those of other suppliers that are subject to the same obligations under G.S. 62-133.8.

(4) Each renewable energy facility or new renewable energy facility registered by the Commission under Rule R8-66 shall participate in NC-RETS in order to have RECs issued, or in another REC tracking system in order to have RECs issued and transferred into NC-RETS, but no facility's meter data for the same time period shall be used for simultaneous REC issuance in two such systems. Beginning June 1, 2011, renewable energy facilities registered in NC-RETS may only enter historic energy production data for REC issuance that goes back up to two years from the current date. Facilities that produce energy using one or more renewable energy resource(s) and another resource that does not qualify toward REPS compliance under G.S. 62-133.8 shall calculate on a monthly basis and provide to NC-RETS the percentage of energy output attributable to each fuel source. NC-RETS will issue RECs only for energy emanating from sources that qualify under G.S. 62-133.8.

(5) Each balancing area operator shall provide monthly electric generation production data to NC-RETS for renewable and new renewable energy facilities that are interconnected to the operator's electric transmission system. Such balancing area operator shall retain documentation verifying the production data for audit by the Public Staff.

(6) Each electric power supplier that has registered renewable energy facilities or new renewable energy facilities interconnected with its electric distribution system and that reads the electric generation production meters for those facilities shall provide monthly the facilities' energy output to NC-RETS, and shall retain for audit for 10 years that energy output data. Municipalities and electric membership corporations may elect to have the facilities' production data reported to NC-RETS and retained for audit by a utility compliance aggregator.

(7) A renewable energy facility or new renewable energy facility that produces thermal energy that qualifies for RECs shall report the facility's qualifying thermal energy output to NC-RETS at least every 12 months. A renewable energy facility or new renewable energy facility that reports its data pursuant to Rule R8-67(g)(3) shall report its energy output to NC-RETS at least every 12 months.

(8) The owner of an inverter-based solar photovoltaic system with a nameplate capacity of 10 kW or less may estimate its energy output using generally accepted analytical tools pursuant to Rule R8-67(g)(2). Such an owner, or its agent, of this kind of facility shall report the facility's energy output to NC-RETS at least every 12 months.

(9) All energy output and fuel data for multi-fuel facilities, including underlying documentation, calculations, and estimates, shall be retained for audit

for at least ten years immediately following the provision of the output data to NC-RETS or another tracking system, as appropriate.

(10) Each electric power supplier that complies with G.S. 62-133.8 by implementing energy efficiency or demand-side management programs shall use NC-RETS to report the estimated and verified energy savings of those programs. Municipal power suppliers and electric membership corporations may elect to have their estimated and verified energy savings from their energy efficiency and demand-side management programs reported to NC-RETS by a utility compliance aggregator, and to have their reported savings consolidated with the reported savings from other municipal power suppliers or electric membership corporations if and as necessary to permit aggregate reporting through their utility compliance aggregators. Records regarding which electric power supplier achieved the energy efficiency and demand-side management, the programs that were used, and the year in which it was achieved, shall be retained for audit.

(11) All Commission-approved costs of developing and operating NC-RETS shall be allocated among all electric power suppliers based upon their respective share of the total megawatt-hours of retail electricity sales in North Carolina in the previous calendar year. Each electric power supplier, or its utility compliance aggregator, shall, within 60 days of NC-RETS beginning operations, and by June 1 of each subsequent year, enter its previous year's retail electricity sales into NC-RETS, which sales will be used by NC-RETS to calculate each electric power supplier's REPS obligations and NC-RETS charges. NC-RETS shall update its billings beginning each July based on retail sales data for the previous calendar year. Such NC-RETS charges shall be deemed to be costs that are reasonable, prudent, incremental, and eligible for recovery through each electric public utility's annual rider established pursuant to G.S. 62-133.8(h).

(12) Each account holder in NC-RETS shall pay the NC-RETS administrator for service according to the following fee schedule:

- (i) \$0.01 for each REC export to an account residing in a different REC tracking system.
- (ii) \$0.01 for each REC retired for reasons other than compliance with G.S. 62-133.8.

(13) The Commission shall adopt NC-RETS Operating Procedures. The Commission shall establish an NC-RETS Stakeholder Group that shall meet from time to time and which may recommend changes to the NC-RETS Operating Procedures and NC-RETS.

(14) All data retention requirements of this Rule R8-67(h) may be accomplished via retention of electronic documents.

**Rule R8-68. INCENTIVE PROGRAMS FOR ELECTRIC PUBLIC UTILITIES AND ELECTRIC MEMBERSHIP CORPORATIONS, INCLUDING ENERGY EFFICIENCY AND DEMAND-SIDE MANAGEMENT PROGRAMS**

(a) Purpose. — The purpose of this rule is to establish guidelines for the application of G.S. 62-140(c) and G.S. 62-133.9 to electric public utilities and electric membership corporations that are consistent with the directives of those statutes and consistent with the public policy of this State as set forth in G.S. 62-2.

(b) Definitions.

(1) Unless listed below, the definitions of all terms used in this rule shall be as set forth in Rule R8-67(a), or if not defined therein, then as set forth in G.S. 62-3, G.S. 62-133.8(a) and G.S. 62-133.9(a).

(2) “Consideration” means anything of economic value paid, given, or offered to any person by an electric public utility or electric membership corporation (regardless of the source of the “consideration”) including, but not limited to: payments to manufacturers, builders, equipment dealers, contractors including HVAC contractors, electricians, plumbers, engineers, architects, and/or homeowners or owners of multiple housing units or commercial establishments; cash rebates or discounts on equipment/appliance sales, leases, or service installation; equipment/ appliances sold below fair market value or below their cost to the electric public utility or electric membership corporation; low interest loans, defined as loans at an interest rate lower than that available to the person to whom the proceeds of the loan are made available; studies on energy usage; model homes; and payment of trade show or advertising costs. Excepted from the definition of “consideration” are favors and promotional activities that are de minimis and nominal in value and that are not directed at influencing fuel choice decisions for specific applications or locations.

(3) “Costs” include, but are not limited to, all capital costs (including cost of capital and depreciation expenses), administrative costs, implementation costs, participation incentives, and operating costs. “Costs” does not include utility incentives.

(4) “Electric public utility” means a person, whether organized under the laws of this State or under the laws of any other state or country, now or hereafter owning or operating in this State equipment or facilities for producing, transporting, distributing, or furnishing electric service to or for the public for consumption. For purposes of this rule, “electric public utility” does not include electric membership corporations.

(5) “Net lost revenues” means the revenue losses, net of marginal costs avoided at the time of the lost kilowatt-hour sale(s), or in the case of purchased power, in the applicable billing period, incurred by the electric public utility as the result of a new demand-side management or energy efficiency measure. Net lost revenues shall also be net of any increases in revenues resulting from any activity by the electric public utility that causes a customer to

increase demand or energy consumption, whether or not that activity has been approved pursuant to this Rule R8-68.

(6) “New demand-side management or energy efficiency measure” means a demand-side management or energy efficiency measure that is adopted and implemented on or after January 1, 2007, including subsequent changes and modifications to any such measure. Cost recovery for “new demand-side management measures” and “new energy efficiency measures” is subject to G.S. 62-133.9.

(7) “Participation incentive” means any consideration associated with a new demand-side management or energy efficiency measure.

(8) “Program” or “measure” means any electric public utility action or planned action that involves the offering of consideration.

(9) “Utility incentives” means incentives as described in G.S. 62-133.9(d)(2)a-c.

(c) Filing for Approval.

(1) Application of Rule.

(i) Prior to an electric public utility or electric membership corporation implementing any measure or program, the purpose or effect of which is to directly or indirectly alter or influence the decision to use the electric public utility’s or electric membership corporation’s service for a particular end use or to directly or indirectly encourage the installation of equipment that uses the electric public utility’s or electric membership corporation’s service, or any new or modified demand-side management or energy efficiency measure, the electric public utility or the electric membership corporation shall obtain Commission approval, regardless of whether the measure or program is offered at the expense of the shareholders, ratepayers, or third-party.

(ii) This requirement shall also apply to measures and programs that are administered, promoted, or funded by the electric public utility’s or electric membership corporation’s subsidiaries, affiliates, or unregulated divisions or businesses if the electric public utility or electric membership corporation has control over the entity offering or is involved in the measure or program and an intent or effect of the measure or program is to adopt, secure, or increase the use of the electric public utility’s public utility services.

(iii) Any application for approval by an electric public utility or electric membership corporation of a measure or program under this rule shall be made in a unique sub-docket of the electric public utility’s or electric membership corporation’s docket number.

(2) Filing Requirements. — Each application for the approval shall include:

(i) Cover Page. — The electric public utility or electric membership corporation shall attach to the front of an application a cover sheet generally describing:

- a. the measure or program;
- b. the consideration to be offered;
- c. the anticipated total cost of the measure or program;
- d. the source and amount of funding to be used; and
- e. the proposed classes of persons to whom it will be offered.

(ii) Description. — The electric public utility or electric membership corporation shall provide a description of each measure and program, and include the following:

- a. the program or measure's objective;
- b. the duration of the program or measure;
- c. the targeted sector and eligibility requirements;
- d. examples of all communication materials to be used with the measure or program and the related cost for each program year;
- e. the estimated number of participants;
- f. the impact that each measure or program is expected to have on the electric public utility or electric membership corporation, its customer body as a whole, and its participating North Carolina customers; and
- g. any other information the electric public utility or electric membership corporation believes is relevant to the application, including information on competition known by the electric public utility or the electric membership corporation.

(iii) Additionally, an electric public utility shall include or describe:

- a. the measure's proposed marketing plan, including a description of market barriers and how the electric public utility intends to address them;

- b. the total market potential and estimated market growth throughout the duration of the program;
- c. the estimated summer and winter peak demand reduction by unit metric and in the aggregate by year;
- d. the estimated energy reduction per appropriate unit metric and in the aggregate by year;
- e. the estimated lost energy sales per appropriate unit metric and in the aggregate by year; and
- f. the estimated load shape impacts.

(iv) **Costs and Benefits.** — The electric public utility or electric membership corporation shall provide the following information on the costs and benefits of each proposed measure or program: (a) the estimated total and per unit cost and benefit of the measure or program to the electric public utility or electric membership corporation, reported by type of benefit and expenditure (e.g., capital cost expenditures; administrative costs; operating costs; participation incentives, such as rebates and direct payments; and communications costs, and the costs of measurement and verification) and the planned accounting treatment for those costs and benefits; (b) the type, the maximum and minimum amount of participation incentives to be made to any party, and the reason for any participation incentives and other consideration and to whom they will be offered, including schedules listing participation incentives and other consideration to be offered; and (c) service limitations or conditions planned to be imposed on customers who do not participate in the measure. With respect to communications costs, the electric public utility or electric membership corporation shall provide detailed cost information on communications materials related to each proposed measure or program. Such costs shall be included in the Commission's consideration of the total cost of the measure or program and whether the total cost of the measure or program is reasonable in light of the benefits.

(v) **Cost-Effectiveness Evaluation.** — The electric public utility or electric membership corporation shall provide the economic justification for each proposed measure or program, including the results of all cost-effectiveness tests. Cost-effectiveness evaluations performed by the electric public utility or electric membership corporation should be based on direct or quantifiable costs and benefits and should include, at a minimum, an analysis of the Total Resource Cost Test, the Participant Test, the Utility Cost Test, and the Ratepayer Impact Measure Test. In addition, an electric public utility shall describe the methodology used to produce the impact estimates as well as, if appropriate, methodologies considered and rejected in the interim leading to the final model specification.

(vi) Commission Guidelines Regarding Incentive Programs. — The electric public utility or electric membership corporation shall provide the information necessary to comply with the Commission's Revised Guidelines for Resolution of Issues Regarding Incentive Programs, issued by Commission Order on March 27, 1996, in Docket No. M-100, Sub 124, set out as an Appendix to Chapter 8 of these rules.

(vii) Integrated Resource Plan. — When seeking approval of a new demand-side management or new energy efficiency measure, the electric public utility or electric membership corporation shall explain in detail how the measure is consistent with the electric public utility's or electric membership corporation's integrated resource plan filings pursuant to Rule R8-60.

(viii) Other. — Any other information the electric public utility or electric membership corporation believes relevant to the application, including information on competition known by the electric public utility or the electric membership corporation.

(3) Additional Filing Requirements. — In addition to the information listed in subsection (c)(2), an electric public utility filing for approval of a new or modified demand-side management or energy efficiency measure shall provide the following:

(i) Costs and Benefits. — The electric public utility shall describe:

a. any costs incurred or expected to be incurred in adopting and implementing a measure or program to be considered for recovery through the annual rider under G.S. 62-133.9;

b. estimated total costs to be avoided by the measure by appropriate capacity, energy and measure unit metric and in the aggregate by year;

c. estimated participation incentives by appropriate capacity, energy, and measure unit metric and in the aggregate by year;

d. how the electric public utility proposes to allocate the costs and benefits of the measure among the customer classes and jurisdictions it serves;

e. the capitalization period to allow the utility to recover all costs or those portions of the costs associated with a new program or measure to the extent that those costs are intended to produce future benefits as provided in G.S. 62-133.9(d)(1).

f. The electric public utility shall also include the estimated and known costs of measurement and verification activities pursuant to the Measurement and Verification Reporting Plan described in paragraph (ii).

(ii) Measurement and Verification Reporting Plan for New Demand-Side Management and Energy Efficiency Measures. — The electric public utility shall be responsible for the measurement and verification of energy and peak demand savings and may use the services of an independent third party for such purposes. The costs of implementing the measurement and verification process may be considered as operating costs for purposes of Commission Rule R8-69. In addition, the electric public utility shall:

- a. describe the industry-accepted methods to be used to evaluate, measure, verify, and validate the energy and peak demand savings estimated in (2)(iii)c and d above;
- b. provide a schedule for reporting the savings to the Commission;
- c. describe the methodologies used to produce the impact estimates, as well as, if appropriate, the methodologies it considered and rejected in the interim leading to final model specification; and
- d. identify any third party and include all of the costs of that third party, if the electric public utility plans to utilize an independent third party for purposes of measurement and verification.

(iii) Cost recovery mechanism. — The electric public utility shall describe the proposed method of cost recovery from its customers.

(iv) Tariffs or rates. — The electric public utility shall provide proposed tariffs or modifications to existing tariffs that will be required to implement each measure or program.

(v) Utility Incentives. — When seeking approval of new demand-side management and energy efficiency measures, the electric public utility shall indicate whether it will seek to recover any utility incentives, including, if appropriate, net lost revenues, in addition to its costs. If the electric public utility proposes recovery of utility incentives related to the proposed new demand-side management or energy efficiency measure, it shall describe the utility incentives it desires to recover and describe how its measurement and verification reporting plan will demonstrate the results achieved by the proposed measure. If the electric public utility proposes recovery of net lost revenues, it shall describe estimated net lost revenues by appropriate capacity, energy and measure unit metric and in the aggregate by year. If the electric public utility seeks recovery of utility incentives, including net lost revenues, apart from its recovery of its costs under G.S. 62-133.9, it shall file estimates of the utility incentives and the net lost revenues associated with the proposed measure for each year of the proposed recovery. If the electric public utility seeks only the recovery of net lost revenues apart from its recovery of combined costs and utility incentives, it shall file estimates of net lost revenues for each year of the proposed recovery period.

(d) Procedure.

(1) Automatic Tariff Suspension. – If an electric public utility files a proposed tariff or tariff amendment in connection with an application for approval of a measure or program, the tariff filing shall be automatically suspended pursuant to G.S. 62-134 pending investigation, review, and decision by the Commission.

(2) Service and Response. – The electric public utility or electric membership corporation filing for approval of a measure or program shall serve a copy of its filing on the Public Staff; the Attorney General; the natural gas utilities, electric public utilities, and electric membership corporations operating in the filing electric public utility's or electric membership corporation's certified territory; and any other party that has notified the electric public utility or electric membership corporation in writing that it wishes to be served with copies of all filings. If a party consents, the electric public utility or electric membership corporation may serve it with electronic copies of all filings. Those served, and others learning of the application, shall have thirty (30) days from the date of the filing in which to petition for intervention pursuant to R1-19, file a protest pursuant to Rule R1-6, or file comments on the proposed measure or program. In comments, any party may recommend approval or disapproval of the measure or program or identify any issue relative to the program application that it believes requires further investigation. The filing electric public utility or electric membership corporation shall have the opportunity to respond to the petitions, protests, or comments within ten (10) days of their filing. If any party raises an issue of material fact, the Commission shall set the matter for hearing. The Commission may determine the scope of this hearing.

(3) Notice and Schedule. — If the application is set for hearing, the Commission shall require notice, as it considers appropriate, and shall establish a procedural schedule for prefiled testimony and rebuttal testimony after a discovery period of at least 45 days. Where possible, the hearing shall be held within ninety (90) days from the application filing date.

(e) Scope of Review. — In determining whether to approve in whole or in part a new measure or program or changes to an existing measure or program, the Commission may consider any information it determines to be relevant, including any of the following issues:

(1) Whether the proposed measure or program is in the public interest and benefits the electric public utility's or electric membership corporation's overall customer body;

(2) Whether the proposed measure or program unreasonably discriminates among persons receiving or applying for the same kind and degree of service;

(3) Evidence of consideration or compensation paid by any competitor, regulated or unregulated, of the electric public utility or electric membership corporation to secure the installation or adoption of the use of such competitor's services;

(4) Whether the proposed measure or program promotes unfair or destructive competition or is inconsistent with the public policy of this State as set forth in G.S. 62-2 and G.S. 62-140; and

(5) The impact of the proposed measure or program on peak loads and load factors of the filing electric public utility or electric membership corporation, and whether it encourages energy efficiency.

(f) Cost Recovery for New Measures. – Approval of a program or measure under Commission Rule R8-68 does not constitute approval of rate recovery of the costs of the program or measure. With respect to new demand-side management and energy efficiency measures, the costs of those new measures, approved by application of this rule, that are found to be reasonable and prudently incurred shall be recovered through the annual rider described in G.S. 62-133.9 and Rule R8-69. The Commission may consider in the annual rider proceeding whether to approve the inclusion of any utility incentive pursuant to G.S. 62-133.9(d)(2)a.-c. in the annual rider.

#### **Rule R8-69. COST RECOVERY FOR DEMAND-SIDE MANAGEMENT AND ENERGY EFFICIENCY MEASURES OF ELECTRIC PUBLIC UTILITIES**

(a) Definitions.

(1) Unless listed below, the definitions of all terms used in this rule shall be as set forth in Rules R8-67 and R8-68, or if not defined therein, then as set forth in G.S. 62-133.8(a) and G.S. 62-133.9(a).

(2) “DSM/EE rider” means a charge or rate established by the Commission annually pursuant to G.S. 62-133.9(d) to allow the electric public utility to recover all reasonable and prudent costs incurred in adopting and implementing new demand-side management and energy efficiency measures after August 20, 2007, as well as, if appropriate, utility incentives, including net lost revenues.

(3) “Large commercial customer” means any commercial customer that has an annual energy usage of not less than 1,000,000 kilowatt-hours (kWh), measured in the same manner as the electric public utility that serves the commercial customer measures energy for billing purposes.

(4) “Rate period” means the period during which the DSM/EE rider established under this rule will be in effect. For each electric public utility, this period will be the same as the period during which the rider established under Rule R8-55 is in effect.

(5) “Test period” shall be the same for each public utility as its test period for purposes of Rule R8-55, unless otherwise ordered by the Commission.

(b) Recovery of Costs.

(1) Each year the Commission shall conduct a proceeding for each electric public utility to establish an annual DSM/EE rider. The DSM/EE rider shall consist of a reasonable and appropriate estimate of the expenses expected to be incurred by the electric public utility, during the rate period, for the purpose of adopting and implementing new demand-side management and energy

efficiency measures previously approved pursuant to Rule R8-68. The expenses will be further modified through the use of a DSM/EE experience modification factor (DSM/EE EMF) rider. The DSM/EE EMF rider will reflect the difference between the reasonable expenses prudently incurred by the electric public utility during the test period for that purpose and the revenues that were actually realized during the test period under the DSM/EE rider then in effect. Those expenses approved for recovery shall be allocated to the North Carolina retail jurisdiction consistent with the system benefits provided by the new demand-side management and energy efficiency measures and shall be assigned to customer classes in accordance with G.S. 62-133.9(e) and (f).

(2) Upon the request of the electric public utility, the Commission shall also incorporate the experienced over-recovery or under-recovery of costs up to thirty (30) days prior to the date of the hearing in its determination of the DSM/EE EMF rider, provided that the reasonableness and prudence of these costs shall be subject to review in the utility's next annual DSM/EE rider hearing.

(3) Pursuant to G.S. 62-130(e), any over-collection of reasonable and prudently incurred costs to be refunded to an electric public utility's customers through operation of the DSM/EE EMF rider shall include an amount of interest, at such rate as the Commission determines to be just and reasonable, not to exceed the maximum statutory rate. The beginning date for measurement of such interest shall be the effective date of the DSM/EE EMF rider in each annual proceeding, unless otherwise determined by the Commission.

(4) The burden of proof as to whether the costs were reasonably and prudently incurred shall be on the electric public utility.

(5) Any costs incurred for adopting and implementing measures that do not constitute new demand-side management or energy efficiency measures are ineligible for recovery through the annual rider established in G.S. 62-133.9.

(6) Except as provided in (c)(3) of this rule, each electric public utility may implement deferral accounting for costs considered for recovery through the annual rider. At the time the Commission approves a new demand-side management or energy efficiency measure under Rule R8-68, the electric public utility may defer costs of adopting and implementing the new measure in accordance with the Commission's approval order under Rule R8-68. Subject to the Commission's review, the electric public utility may begin deferring the costs of adopting and implementing new demand-side management or energy efficiency measures six (6) months prior to the filing of its application for approval under Rule R8-68, except that the Commission may consider earlier deferral of development costs in exceptional cases, where such deferral is necessary to develop an energy efficiency measure. Deferral accounting, however, for any administrative costs, general costs, or other costs not directly related to a new demand-side management or energy efficiency measure must be approved prior to deferral. The balance in the deferral account, net of deferred income taxes, may accrue a return at the net-of-tax rate of return approved in the electric public utility's most recent general rate proceeding. The return so calculated will be adjusted in any rider calculation to reflect necessary recoveries of income taxes.

This return is not subject to compounding. The accrual of such return of on any under-recovered or over-recovered balance set in an annual proceeding for recovery or refund through a DSM/EE EMF rider shall cease as of the effective date of the DSM/EE EMF rider in that proceeding, unless otherwise determined by the Commission. However, deferral accounting of costs shall not affect the Commission's authority under this rule to determine whether the deferred costs may be recovered.

(c) Utility Incentives.

(1) With respect to a new demand-side management or energy efficiency measure previously approved under Rule R8-68, the electric public utility may, in its annual filing, apply for recovery of any utility incentives, including, if appropriate, net lost revenues, identified in its application for approval of the measure. The Commission shall determine the appropriate ratemaking treatment for any such utility incentives.

(2) When requesting inclusion of a utility incentive in the annual rider, the electric public utility bears the burden of proving its calculations of those utility incentives and the justification for including them in the annual rider, either through its measurement and verification reporting plan or through other relevant evidence.

(3) An electric public utility shall not be permitted to implement deferral accounting or the accrual of a return for utility incentives unless the Commission approves an annual rider that provides for recovery of an integrated amount of costs and utility incentives. In that instance, the Commission shall determine the extent to which deferral accounting and the accrual of a return will be allowed.

(d) Special Provisions for Industrial or Large Commercial Customers.

(1) Pursuant to G.S. 62-133.9(f), any industrial customer or large commercial customer may notify its electric power supplier that: (i) it has implemented or, in accordance with stated, quantifiable goals, will implement alternative demand-side management or energy efficiency measures; and (ii) it elects not to participate in demand-side management or energy efficiency measures for which cost recovery is allowed under G.S. 62-133.9. Any such customer shall be exempt from any annual rider established pursuant to this rule after the date of notification.

(2) At the time the electric public utility petitions for the annual rider, it shall provide the Commission with a list of those industrial or large commercial customers that have opted out of participation in the new demand-side management or energy efficiency measures. The electric public utility shall also provide the Commission with a listing of industrial or large commercial customers that have elected to participate in new measures after having initially notified the electric public utility that it declined to participate.

(3) Any customer that opts out but subsequently elects to participate in a new demand-side management or energy efficiency measure or program loses the right to be exempt from payment of the rider for five years or the life of the measure or program, whichever is longer. For purposes of this subsection, "life of

the measure or program” means the capitalization period approved by the Commission to allow the utility to recover all costs or those portions of the costs associated with a program or measure to the extent that those costs are intended to produce future benefits as provided in G.S. 62-133.9(d)(1).

(e) Annual Proceeding.

(1) For each electric public utility, the Commission shall schedule an annual rider hearing pursuant to G.S. 62-133.9(d) to review the costs incurred by the electric public utility in the adoption and implementation of new demand-side management and energy efficiency measures during the test period, the revenues realized during the test period through the operation of the annual rider, and the costs expected to be incurred during the rate period and shall establish annual DSM/EE and DSM/EE EMF riders to allow the electric public utility to recover all costs found by the Commission to be recoverable. The Commission may also approve, if appropriate, the recovery of utility incentives, including net lost revenues, pursuant to G.S. 62-133.9(d)(2) in the rider.

(2) The annual rider hearing for each electric public utility will be scheduled as soon as practicable after the hearing held by the Commission for the electric public utility under Rule R8-55. Each electric public utility shall file its application for recovery of costs and appropriate utility incentives at the same time that it files the information required by Rule R8-55.

(3) The DSM/EE EMF rider will remain in effect for a fixed 12-month period following establishment and will continue as a rider to rates established in any intervening general rate case proceeding.

(f) Filing Requirements and Procedure.

(1) Each electric public utility shall submit to the Commission all of the following information and data in its application:

(i) Projected North Carolina retail monthly kWh sales for the rate period.

(ii) For each measure for which cost recovery is requested through the DSM/EE rider:

a. total expenses expected to be incurred during the rate period in the aggregate and broken down by type of expenditure, per appropriate capacity, energy and measure unit metric and the proposed jurisdictional allocation factors;

b. total costs that the utility does not expect to incur during the rate period as a direct result of the measure in the aggregate and broken down by type of cost, per appropriate capacity, energy and measure unit metric, and the proposed jurisdictional allocation factors, as well as any changes in the estimated future amounts since last filed with the Commission;

c. a description of the measurement and verification activities to be conducted during the rate period, including their estimated costs;

d. total expected summer and winter peak demand reduction per appropriate measure unit metric and in the aggregate;

e. total expected energy reduction in the aggregate and per appropriate measure unit metric.

(iii) For each measure for which cost recovery is requested through the DSM/EE EMF rider:

a. total expenses for the test period in the aggregate and broken down by type of expenditure, per appropriate capacity, energy and measure unit metric and the proposed jurisdictional allocation factors;

b. total costs that the utility did not incur for the test period as a direct result of the measure in the aggregate and broken down by type of cost, per appropriate capacity, energy and measure unit metric, and the proposed jurisdictional allocation factors, as well as any changes in the estimated future amounts since last filed with the Commission;

c. a description of, the results of, and the costs of all measurement and verification activities conducted in the test period;

d. total summer and winter peak demand reduction in the aggregate and per appropriate measure unit metric, as well as any changes in estimated future amounts since last filed with the Commission;

e. total energy reduction in the aggregate and per appropriate measure unit metric, as well as any changes in the estimated future amounts since last filed with the Commission;

f. a discussion of the findings and the results of the program or measure;

g. evaluations of event-based programs including the date, weather conditions, event trigger, number of customers notified and number of customers enrolled; and

h. a comparison of impact estimates presented in the measure application from the previous year, those used in reporting for previous measure years, and an explanation of significant differences in the impacts reported and those previously found or used.

(iv) For each measure for which recovery of utility incentives is requested, a detailed explanation of the method proposed for calculating those utility incentives, the actual calculation of the proposed utility incentives, and the proposed method of providing for their recovery and true-up through the annual rider. If recovery of net lost revenues is requested, the total net lost kWh sales and net lost revenues per appropriate capacity, energy, and program unit metric and in the

aggregate for the test period, and the proposed jurisdictional allocation factors, as well as any changes in estimated future amounts since last filed with the Commission.

(v) Actual revenues produced by the DSM/EE rider and the DSM/EE EMF rider established by the Commission during the test period and for all available months immediately preceding the rate period.

(vi) The requested DSM/EE rider and DSM/EE EMF rider and the basis for their determination.

(vii) Projected North Carolina retail monthly kWh sales for the rate period for all industrial and large commercial accounts, in the aggregate, that are not assessed the rider charges as provided in this rule.

(viii) All workpapers supporting the calculations and adjustments described above.

(2) Each electric public utility shall file the information required under this rule, accompanied by workpapers and direct testimony and exhibits of expert witnesses supporting the information filed in this proceeding, and any change in rates proposed by the electric public utility, by the date specified in subdivision (e)(2) of this rule. An electric public utility may request a rider lower than that to which its filed information suggests that it is entitled.

(3) The electric public utility shall publish a notice of the annual hearing for two (2) successive weeks in a newspaper or newspapers having general circulation in its service area, normally beginning at least thirty (30) days prior to the hearing, notifying the public of the hearing before the Commission pursuant to G.S. 62-133.9(d) and setting forth the time and the place of the hearing.

(4) Persons having an interest in any hearing may file a petition to intervene at least 15 days prior to the date of the hearing. Petitions to intervene filed less than 15 days prior to the date of the hearing may be allowed in the discretion of the Commission for good cause shown.

(5) The Public Staff and other intervenors shall file direct testimony and exhibits of expert witnesses at least 15 days prior to the hearing date. If a petition to intervene is filed less than 15 days prior to the hearing date, it shall be accompanied by any direct testimony and exhibits of expert witnesses the intervenor intends to offer at the hearing.

(6) The electric public utility may file rebuttal testimony and exhibits of expert witnesses no later than 5 days prior to the hearing date.

**CHAPTER 8.**  
**APPENDIX.**

REVISED GUIDELINES FOR RESOLUTION OF ISSUES  
REGARDING INCENTIVE<sup>1</sup> PROGRAMS

(1) To obtain Commission approval of a residential or commercial program involving incentives per Rule R1-38 [now Rule R6-95 or R8-68], the sponsoring utility must demonstrate that the program is cost effective for its ratepayers.

(a) Maximum incentive payments to any party must be capable of being determined from an examination of the applicable program.

(b) Existing approved programs are grandfathered. However, utilities shall file a listing of existing approved programs subject to these guidelines, including applicable tariff sheets, and amount and type of incentives involved in each program or procedure for calculating such incentives in each program, all within 60 days after approval of these guidelines.

(c) Utilities shall file a description of any new program or of a change in an existing program, including applicable tariff sheets, and amount and type of incentives involved in each program or procedure for calculating such incentives in each program, all at least 30 days prior to changing or introducing the program.

(d) The matter of the relative efficiency of electricity versus natural gas under various scenarios (space heating alone, space heating plus A/C, etc.) cannot now be resolved. A better approach at this time would be to determine the acceptability of incentive programs herein based on the energy efficiency of electricity alone or of natural gas alone, as applicable.

(e) The criteria for determining whether or not to approve an electric program pursuant to G.S. 62-140(c) should not include consideration of the impact of an electric program on the sales of natural gas, or vice versa.

(f) Approval of a program pursuant to Commission Rule R1-38 [now Rule R6-95 or R8-68] does not constitute approval of rate recovery of the costs of the program. The appropriateness of rate recovery shall be evaluated in general rate cases or similar proceedings.

(2) If a program involves an incentive per Rule R1-38 [now Rule R6-95 or R8-68] and the incentive affects the decision to install or adopt natural gas service or electric service in the residential or commercial market, there shall be a rebuttable presumption that the program is promotional in nature.

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<sup>1</sup> All incentives referenced in these Revised Guidelines are participation incentives as now defined in Rule R8-68(b)(7).

(a) If the presumption that a program is promotional is not successfully rebutted, the cost of the incentive may not be recoverable from the ratepayers unless the Commission finds good cause to do so.

(b) If the presumption that a program is promotional is successfully rebutted, the cost of the incentive may be recoverable from the ratepayers. The cost shall not be disallowed in a future proceeding on the grounds that the program is primarily designed to compete with other energy suppliers. The amount of any recovery shall not exceed the difference between the cost of installing equipment and/or constructing a dwelling to current state/federal energy efficiency standards and the more stringent energy efficiency requirements of the program, to the extent found just and reasonable by the Commission.

(c) The presumption that a program is promotional may generally be rebutted at the time it is filed for approval by demonstrating that the incentive will encourage construction of dwellings and installation of appliances that are more energy efficient than required by state and/or federal building codes and appliance standards, subject to Commission approval.

(3) If a program involves an incentive paid to a third party builder (residential or commercial), the builder shall be advised by the sponsoring utility that the builder may receive the incentive on a per structure basis without having to agree to: (1) a minimum number or percentage of all-gas or all-electric structures to be built in a given subdivision development or in total; or (2) the type of any given structure (gas or electric) to be built in a given subdivision development.

(a) Electric and gas utilities may continue to promote and pay incentives for all-electric and all-gas structures respectively, provided such programs are approved by the Commission.

(b) A builder shall be advised by the sponsoring utility of the availability of natural gas or electric alternatives, as appropriate.

(c) A builder receiving incentives shall not be required to advertise that the builder is exclusively an all-gas or all-electric builder for either a particular subdivision or in general.

(4) The promotional literature for any program offering energy-efficiency mortgage discounts shall explain that the structures financed under the program need not be all-electric or all-gas.

(5) Duke's proposed Food Service Program shall be modified to include a definition of qualifying equipment and of conventional equipment, and is subject to approval in accordance with guideline number 1 above.

(a) The nature or amount of incentive contained in each program encouraging the installation of commercial appliances (electric or gas) that use the sponsoring utility's energy product, such as Duke's Food Service Program, shall be unaffected by the availability or use of alternate fuels in the applicable customer's facility.

(b) Commercial clients (builders, customers, etc.) who are offered incentives for installation of appliances shall be advised by the sponsoring utility of the availability of natural gas or electric alternatives, as appropriate.

(6) Rates, rate design issues, and terms and conditions of service approved by the Commission are not subject to these guidelines.

(7) Pending applications involving incentive programs are subject to these guidelines.

### Application to Register a Renewable Energy Facility or New Renewable Energy Facility Pursuant to Rule R8-66

(Applicants should consult Rule R8-66 while completing this form in order to ensure they provide sufficient information.)

Facility name:	
Full and correct name of the owner of the facility:	
Business address:	
Electronic mailing address:	
Telephone number:	
Owner's agent for purposes of this application, if applicable:	
Agent's business address:	
Agent's electronic mailing address:	
Agent's telephone number:	
The owner is:	<input type="checkbox"/> Individual <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation (including LLC)
If a corporation, state and date of incorporation.	State _____ Date _____

<p>If a corporation that is incorporated outside of North Carolina, is it domesticated in North Carolina?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>If a partnership, the name and business address of each general partner. (Add additional sheets if necessary.)</p>	
<p>Nature of the renewable energy facility:</p>	
<p>1. Describe the facility, including its technology, and the source of its power and fuel(s). Thermal facilities should describe how its host uses the facility's thermal energy output. (Add additional sheets if necessary.)</p>	
<p>2. Whether it produces electricity, useful thermal energy, or both.</p>	
<p>3. Nameplate capacity in kW/MW (AC) and/or maximum Btu per hour for thermal facilities.</p>	
<p>The location of the facility set forth in terms of local highways, streets, rivers, streams, or other generally known local landmarks. <b>Attach a map, such as a county road map, with the location indicated on the map.</b></p>	

<p>Site ownership:</p>	
<p>1. Is the site owner other than the facility owner? If yes, who is the site owner?</p>	
<p>2. What is the facility owner's legal interest in the site?</p>	
<p>List the approvals that are required to build and/or operate this facility, and attach copies of those that have been obtained. Wind facilities with multiple turbines, where each turbine is licensed separately, may provide copies of approvals for one such turbine but shall add an attestation that approvals for all of the turbines are available for inspection.</p>	
<p>1. Federal permits and licenses:</p>	
<p>2. State permits and licenses:</p>	
<p>3. Exemptions required for construction and operation of the facility:</p>	
<p>4. Statement of whether each has been obtained or applied for (attach copy of those that have been obtained with this application):</p>	
<p>If the facility has been placed into service, on what date did the facility begin operating?</p>	
<p>If the facility is not yet operating, on what date is the facility projected to be placed into service?</p>	

<p>If the facility is already operating, what is the amount of energy produced by the facility, net of station use, for the most recent 12-month or calendar-year period? Energy production data for a shorter time period is acceptable for facilities that have not yet operated for a full year.</p>	
<p>What entity does (or will) read the facility's energy production meter(s) for the purpose of issuing renewable energy certificates?</p>	
<p>For thermal energy facilities, describe the method to be used to determine the facility's thermal energy production, in BTUs, that is eligible for REC issuance.</p>	
<p>Does the facility participate in a REC tracking system and if so, which one? If not, which tracking system will the facility participate in for the purpose of REC issuance?</p>	
<p>If this facility has already been the subject of a proceeding or submittal before the Commission, such as a Report of Proposed Construction or a Certificate of Public Convenience and Necessity, please provide the Commission Docket Number, if available.</p>	

The owner of the renewable energy facility shall provide the following attestations, signed and notarized:

1.  Yes  No I certify that the facility is in substantial compliance with all federal and state laws, regulations, and rules for the protection of the environment and conservation of natural resources.
  
2.  Yes  No I certify that the facility satisfies the requirements of G.S. 62-133.8(a)(5) or (7) as a:  
 \_\_\_\_\_ renewable energy facility, or  
 \_\_\_\_\_ new renewable energy facility,  
 and that the facility will be operated as a:  
 \_\_\_\_\_ renewable energy facility, or  
 \_\_\_\_\_ new renewable energy facility.
  
3.  Yes  No I certify that 1) my organization is not simultaneously under contract with NC GreenPower to sell our RECs emanating from the same electricity production being tracked in NC-RETS; and 2) any renewable energy certificates (whether or not bundled with electric power) sold to an electric power supplier to comply with G.S. 62-133.8 have not, and will not, be remarketed or otherwise resold for any other purpose, including another renewable energy portfolio standard or voluntary purchase of renewable energy certificates in North Carolina (such as NC GreenPower) or any other state or country, and that the electric power associated with the certificates will not be offered or sold with any representation that the power is bundled with renewable energy certificates.
  
4.  Yes  No I certify that I consent to the auditing of my organization's books and records by the Public Staff insofar as those records relate to transactions with North Carolina electric power suppliers, and agree to provide the Public Staff and the Commission access to our books and records, wherever they are located, and to the facility.
  
5.  Yes  No I certify that the information provided is true and correct for all years that the facility has earned RECs for compliance with G.S. 62-133.8.
  
6.  Yes  No I certify that I am the owner of the renewable energy facility or am duly authorized to act on behalf of the owner for the purpose of this filing.

\_\_\_\_\_  
 (Signature)

\_\_\_\_\_  
 (Title)

\_\_\_\_\_  
 (Name - Printed or Typed)

\_\_\_\_\_  
 (Date)

**VERIFICATION**

STATE OF \_\_\_\_\_ COUNTY OF \_\_\_\_\_

\_\_\_\_\_, personally appeared before me this day and, being first duly sworn, says that the facts stated in the foregoing application and any exhibits, documents, and statements thereto attached are true as he or she believes.

WITNESS my hand and notarial seal, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

My Commission Expires: \_\_\_\_\_

\_\_\_\_\_  
Signature of Notary Public

\_\_\_\_\_  
Name of Notary Public – Typed or Printed

The name of the person who completes and signs the application must be typed or printed by the notary in the space provided in the verification. The notary's name must be typed or printed below the notary's seal. This original verification must be affixed to the original application, and a copy of this verification must be affixed to each of the 15 copies that are also submitted to the Commission.



# **NORTH CAROLINA RENEWABLE ENERGY TRACKING SYSTEM INTERIM OPERATING PROCEDURES**

**~~June 30~~ January 31, 2011~~0~~**

**Disclaimer:** This document is intended to guide the operations of NC-RETS, both the users of the system and its administrator, APX. It is intended to be consistent with the NC Utilities Commission's rules implementing North Carolina's Renewable Energy and Energy Efficiency Portfolio Standard. Please contact Commission Staff if you believe there is a conflict between these Operating Procedures and the Commission's rules. NC-RETS users can propose changes to these procedures by participating in the NC-RETS Stakeholders Group.

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## Glossary

**Account:** An Account is the vehicle by which an individual or an organization participates in NC-RETS and uses the system to upload Renewable Energy Facility production data, or to create, hold, track and/or retire RECs in Sub-accounts, or to audit an Electric Power Supplier's compliance with North Carolina's Portfolio Standard. There are four Account types in NC-RETS: NC Electric Power Supplier, General, Qualified Reporting Entity, and Program Auditor.

**Account ID:** A unique NC-RETS identifier for an Account that is assigned by NC-RETS when the NC-RETS Administrator approves the Account in NC-RETS.

**Account Holder:** An Account Holder is a person or organization that has registered with NC-RETS and has established an Account in order to own RECs in NC-RETS, provide Renewable Energy Facility production data to NC-RETS, or audit a compliance program within NC-RETS.

**Account Manager:** An Account Manager is the administrator for an Account Holder's NC-RETS Account, having the ability to, among other things, setup and manage additional logins and login privileges for other Users, typically other employees of the same organization.

**Active Certificates:** An Active Certificate is a Renewable Energy Certificate or Energy Efficiency Certificate that is held in an Active Sub-account and that has not yet been retired. Such Certificates may be traded, transferred, exported or retired at the discretion of the Account Holder of the Active Sub-account, except that Energy Efficiency Certificates can be used for compliance with North Carolina's Portfolio Standard only by the Electric Power Supplier that produced them or by a group of affiliated Electric Power Suppliers using the same Utility Compliance Aggregator.

**Active Sub-account:** An Active Sub-account is a Sub-account of an Account Holder's Account and is the holding place for all Active Certificates. If the Account Holder is the owner of a Renewable Energy Facility, or is the Responsible Party of a Renewable Energy Facility, their Active Sub-account will be the first point of deposit for any Certificates created that are associated with the Project ID number, unless the Certificate is subject to a Forward Certificate Transfer. Similarly, if the Account Holder is an Electric Power Supplier that operates an energy efficiency program, the related Certificates are created in an Active Sub-account. An Active Sub-account may be associated with one or more Projects.

**Balancing Authority:** The entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority area,

and supports interconnection frequency in real time. Duke Energy and Progress Energy are the Balancing Authorities for most of North Carolina. PJM is the Balancing Authority for Dominion North Carolina Power's service area.

**Bulletin Board Sub-account:** The Bulletin Board Sub-account is an Active Sub-account of an Account Holder's Account and is the holding place for Active Certificates that the Account Holder has posted for sale on the Bulletin Board.

**Certificate:** NC-RETS issues two kinds of Certificates: Renewable Energy Certificates (RECs), and Energy Efficiency Certificates (EECs). Unless otherwise specified by statute, rule or NCUC order, NC-RETS will issue one Certificate for each MWh of energy produced by a Renewable Energy Facility or saved via an Electric Power Supplier-sponsored energy efficiency or demand-side management program. Certificates from Renewable Energy Facilities that are Multi-fuel Facilities shall be issued pursuant to Section 4.2.

**Commission:** The Commission is the North Carolina Utilities Commission.

**Compliance Sub-account:** A Sub-account used by an Electric Power Supplier or Utility Compliance Aggregator to demonstrate compliance with a specific year of Portfolio Standard obligation(s). The Account Holder places Certificates into the Compliance Sub-account, which is then audited by the Public Staff. Once the Commission has approved the Account Holder's compliance with the Portfolio Standard, the RECs are retired.

**Creation Date:** The date (DD/MM/YYYY) that a Certificate is created. Certificates are created upon acceptance of production data by the Account Holder, or if the production data passes all system validations, the Certificates will automatically create fourteen (14) days after the production data was uploaded into NC-RETS.

**Customer-Sited Distributed Generation:** A Renewable Energy Facility that is interconnected behind a retail customer meter and therefore not directly interconnected with either the distribution system or transmission system (including net metered facilities).

**Directory of Account Holders:** The Directory of Account Holders is a listing of all Account Holders registered with NC-RETS. This directory includes limited information for contacting each Account Holder and is available to the public via the NC-RETS website.

**Directory of Renewable Energy Facilities and Energy Efficiency Projects:** This is a listing of all approved Projects within NC-RETS.

**Dynamic Data:** Dynamic Data is variable information that is associated with a specific MWh produced or saved by a Project, such as Certificate Serial Number or Creation Date.

**Electric Power Supplier:** An organization that sells electricity to retail end users, such as investor-owned utilities, municipal utilities, and electric membership corporations. All Electric Power Suppliers in North Carolina must comply with the State's Portfolio Standard, although the requirements vary slightly for investor-owned utilities versus municipal utilities and electric membership corporations.

**Forward Transfer:** A transfer of Certificates arranged in advance to be effectuated on a specific future date.

**Fuel Type:** The kind of fuel or source of energy used to produce electric or thermal energy at a Renewable Energy Facility. See Appendix D for a list of eligible Fuel Types. This list was established by the North Carolina General Assembly when it enacted NC's Portfolio Standard.

**General Account:** This type of Account can hold, transfer (outgoing and incoming), and Retire Certificates for voluntary (non-compliance) reasons. This kind of Account can also open a Sub-account where RECs are created for a Renewable Energy Facility.

**Generation Activity Log:** The Generation Activity Log is an electronic ledger where energy production from Renewable Energy Facilities and energy saved by Electric Power Supplier energy efficiency programs is posted prior to Certificate creation. Each time production or savings data is received by NC-RETS for a particular Project, the date and quantity of qualifying MWhs produced or saved is posted to the Generation Activity Log. Adjustments received are posted likewise.

**Inbox:** Certificate transfers to an Account Holder are first posted in the Account Holder's Inbox. The Account Holder then either accepts or rejects the transfer. Upon acceptance, the Certificates are deposited in the Sub-account designated by the Account Holder.

**Megawatt-hour (MWh):** One thousand kilowatt-hours or 1 million watt-hours of energy. One MWh of energy produced by a qualifying fuel at a Renewable Energy Facility is required to create one Renewable Energy Certificate. One MWh of energy saved by an Electric Power Supplier's energy efficiency or demand side management project is required to create one Energy Efficiency Certificate.

**Multi-fuel Facility or Generation Project:** A Renewable Energy Facility that produces energy using more than one Fuel Type and might partially rely on a fuel that does not qualify for issuance of Certificates. See Section 4.2 below.

**Nameplate Capacity:** The maximum rated output of a generator, prime mover or other electric power production equipment under specific conditions designated by the manufacturer. Size classification in Megawatts (MW) is based on Nameplate Capacity.

**NC-RETS Administrator:** The NC-RETS Administrator is the entity under contract with the Commission to implement the NC-RETS Operating Procedures. The Commission selected APX to be the NC-RETS Administrator. The NC-RETS Administrator confers with Commission Staff, which seeks Commission concurrence, for exceptions to the NC-RETS Operating Procedures.

**North Carolina Electric Power Supplier Account:** This type of Account can hold, transfer (outgoing and incoming), and Retire Certificates. A North Carolina Electric Power Supplier Account can also register and maintain Projects and have Certificates issued to it for its Projects. A North Carolina Electric Power Supplier Account is the only kind of Account that can retire Certificates for compliance with NC's Portfolio Standard.

**Outbox:** After initiating a Certificate transfer, an Account Holder will see the Certificates in its Outbox. The Account Holder to whom the Certificates have been transferred will either accept or reject the transfer. If rejected, the Certificates will be returned to the Active Sub-account from which they were transferred. If accepted, the Certificates are transferred to the receiving Account Holder.

**Portfolio Standard:** The law enacted by North Carolina's General Assembly via Session Law 2007-397 that requires all Electric Power Suppliers serving retail customers in North Carolina to meet an increasing portion of their customers' electricity needs from renewable energy and conservation.

**Prior Period Adjustment:** An addition or subtraction made to a current Certificate issuance in order to correct for an under- or over-issuance of Certificates made in error in a prior period, most commonly due to inaccurate metering data.

**Program Auditor Account:** North Carolina regulators will use this Account to review Compliance Sub-accounts submitted by North Carolina Electric Power Suppliers and Utility Compliance Aggregators, as well as to view NC-RETS reports.

**Project:** A Project is either a Renewable Energy Facility or an Electric Power Supplier's qualifying energy efficiency programs (including demand-side management for municipalities and electric membership corporations).

**Project ID:** A unique NC-RETS identifier for a Project that is assigned by NC-RETS when the NC-RETS Administrator approves a Project for Certificate issuance in NC-RETS.

**Project Name:** Project Name is the name assigned to a Project when it is registered in NC-RETS.

**Public Staff:** The State agency charged with investigating Electric Power Supplier compliance with North Carolina's Portfolio Standard (among other things) and representing the using and consuming public in proceedings before the Commission.

**Qualified Reporting Entity (QRE) Account:** This Account type should be used for an NC-RETS Account Holder that reports meter readings and other generation data to the NC-RETS Administrator. Qualified Reporting Entities include Balancing Authorities, Electric Power Suppliers, a federal power agency or a municipal power agency. A QRE Account is assigned to each Project (except for those that are allowed to provide Qualified Estimates and Self-Reporting Facilities) and it is responsible for providing the Project's energy production information. NC-RETS tracks the specific Projects for which a QRE provides production information. A QRE Account cannot hold Certificates.

**Qualifying Estimates:** These are electric production estimates, based on generally accepted analytical tools such as PV Watts ([www.pvwatts.com](http://www.pvwatts.com)) for inverter-based solar photovoltaic Renewable Energy Facilities with a Nameplate Capacity of 10 kW or less. The facility owner shall document such estimates and retain such documentation for audit by the Commission and the Public Staff. Qualifying Estimates may be used to issue RECs in NC-RETS.

**Qualifying Meter:** This is a meter that provides energy production data of sufficient quality that it can be relied upon for the issuance of Certificates. For a Renewable Energy Facility that is interconnected to a Balancing Authority, it is the meter or data source that is used by the Balancing Authority for settlements. For Renewable Energy Facilities that are interconnected to an Electric Power Supplier's distribution system, it is the meter supplied by and read by the Electric Power Supplier. For a Renewable Energy Facility that is interconnected behind an Electric Power Supplier's meter at a customer's location, a Qualifying Meter can either be 1) an ANSI-certified meter that may be read and self-reported by the owner of the Renewable Energy Facility who shall comply with the Commission's meter testing requirements pursuant to Commission Rule R8-13; or 2) another industry-accepted, auditable and accurate metering, controls and verification system. For a combined heat and power system or solar thermal energy facility that has been approved by the Commission as a Renewable Energy Facility, the facility's useful thermal energy (excluding energy used to produce electricity) may be measured by an industry-accepted meter for

measuring British thermal units (Btu). NC-RETS shall issue one Certificate for every 3,412,000 Btu of qualifying thermal energy.

**Qualifying MWh:** Energy that is produced by a Renewable Energy Facility via a fuel source or technology that qualifies it for the NC Portfolio Standard.

**Renewable Energy Certificate (REC):** See Certificates.

**Renewable Energy Facility:** An energy production facility that has been approved by the Commission as eligible to have some or all of its output count toward NC's Portfolio Standard. The owner of such a Facility located in North Carolina is eligible to register that Facility in NC-RETS, where Certificates are issued for qualifying energy production.<sup>1</sup>

**Responsible Party:** An Account Holder who has been assigned the registration rights for a given Project. This assignment occurs outside of NC-RETS and gives the designated Account Holder *full and sole* management authority over the transactions and activities related to the Project within NC-RETS.

**Retirement Sub-account:** A Retirement Sub-account is used as a repository for Certificates that the Account Holder wants to designate as Retired and remove from circulation. Once a Certificate has been transferred into a Retirement Sub-account, it cannot be transferred again to any other Sub-Account.

**Retirement of Certificates or Retirement/Retire:** Retirement of Certificates is an action taken within NC-RETS to permanently remove a Certificate from circulation. There are two types of retirement: voluntary or compliance. Retirement may be initiated only by the Account Holder for Certificates in his/her own Sub-accounts. Voluntary retirement is effectuated by transferring Certificates into a Retirement Sub-account. For Electric Power Suppliers, compliance retirement occurs when RECs are placed into a Compliance Sub-account, and submitted for review to the Commission. RECs associated with an approved Compliance Sub-account are placed into retirement by Commission action.

**Self-Reporting Facility:** This is a Renewable Energy Facility or utility-sponsored energy efficiency or demand-side management Project for which the owner self-reports its output or energy savings. This includes 1) a customer-sited Renewable Energy Facility interconnected behind an Electric Power Supplier's meter that has either 1) a meter that meets ANSI standards and complies with Commission Rule R8-13, or 2) another industry-accepted, auditable and accurate metering, controls and verification system; 2) inverter-based solar facilities of 10-kW or less; 3) solar thermal facilities; and 4) combined heat and power

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<sup>1</sup> The owner of a Renewable Energy Facility that is located in South Carolina, which has its meter read by a NC Electric Power Supplier, may also register the Project in NC-RETS for the issuance of RECs.

facilities. Self-Reporting Facilities transmit their production data to the NC-RETS Administrator via the Self-Reporting Interface pursuant to Section 5.7.

**Self-Reporting Interface:** This is a standard internet-based data entry portal that serves as the method for a Self-Reporting Facility, including energy efficiency and demand-side management Projects, to communicate dynamic data to the NC-RETS Administrator pursuant to Section 5.7.

**Serial Number:** NC-RETS assigns a Serial Number to each Certificate that it issues. The Serial Number contains embedded codes that explain when it was issued.

**Static Data:** Static Data describes the attributes of a Project and includes information related to the characteristics of the Renewable Energy Facility such as technology type, ownership and location.

**Station Service:** Station Service is the portion of electricity or thermal energy produced by a Renewable Energy Facility that is immediately consumed at that same facility in order to power the facility's pumps, etc., or to process fuel. Such energy is not eligible for issuance of Certificates.

**User:** Any person who has been granted access by an Account Holder to "use" its Account in NC-RETS, which may include viewing information, performing transactions and changing personal information. The Account Holder may at any time revoke the permissions granted to a User by notifying the NC-RETS Administrator. NC-RETS tracks the specific activities of each User through their unique login and password.

**Utility Compliance Aggregator:** An organization that assists an Electric Power Supplier or group of Electric Power Suppliers in demonstrating its compliance with NC's Portfolio Standard.

## 1. Introduction

The Commission established the North Carolina Renewable Energy Tracking System (NC-RETS) to issue and track Renewable Energy Certificates (RECs) and Energy Efficiency Certificates (EECs). NC's electric utilities use NC-RETS to demonstrate compliance with the State's Portfolio Standard established under Session Law 2007-397. Renewable energy producers may register their facilities with the Commission. If approved, they can use NC-RETS to create RECs that meet the requirements of NC's Portfolio Standard.

NC-RETS uses verifiable energy production data from participating facilities to create one digital Certificate for each MWh (or thermal equivalent) generated from renewable energy. Electric Power Suppliers and Utility Compliance Aggregators use NC-RETS to track the results of qualifying energy efficiency and demand-side management customer programs operated by Electric Power Suppliers. NC-RETS and all related energy production and customer program records are audited by the Public Staff of the North Carolina Utilities Commission. NC-RETS will integrate with all other REC tracking systems in the United States to allow for the import and export of RECs to and from North Carolina.

## 2. NC-RETS User Registration

### 2.1 Participation in NC-RETS

Any party is eligible to participate in NC-RETS, which means that any person can own RECs and track them in NC-RETS. NC-RETS includes many reports and links that are available to the general public. The Public Staff and the Commission use NC-RETS to audit compliance with NC's Portfolio Standard.

Electric Power Suppliers (or their Utility Compliance Aggregators) must use NC-RETS to demonstrate their compliance with NC's Portfolio Standard. An Electric Power Supplier establishes an Account in NC-RETS to hold RECs, including those that they acquire or generate and those associated with allocations from the Southeastern Power Administration (SEPA). Similarly, an Electric Power Supplier uses NC-RETS to document and track eligible energy savings via Energy Efficiency Certificates (EECs) from its qualifying energy efficiency and demand-side management programs. Each year, starting in 2011 for the 2010 compliance year, Electric Power Suppliers and Utility Compliance Aggregators will move RECs and EECs into a Compliance Sub-account, which will be audited to determine whether the organization

complied with the Portfolio Standard.<sup>2</sup> Once the Commission determines that the organization has complied, those RECs will be permanently Retired, meaning they cannot be sold or reused for compliance.

NC-RETS issues and tracks Certificates originating from NC's Projects registered in NC-RETS and also tracks those Certificates that are imported into NC-RETS from other tracking systems in the United States. Organizations that operate Renewable Energy Facilities located in North Carolina and that want RECs associated with their facilities' output to be eligible to count toward NC's Portfolio Standard must participate in NC-RETS.<sup>3</sup> They use NC-RETS to create an Account for each facility where production data (meter readings or self-reported data, depending on the facility's size) or other criteria are uploaded, and RECs are issued. After arranging to sell RECs to a North Carolina Electric Power Supplier or Utility Compliance Aggregator, they will be able to use NC-RETS to transfer those RECs to the purchaser. In addition, NC-RETS has a Bulletin Board where they can post RECs that they would like to sell.

Utility organizations that read the production meters for any Renewable Energy Facilities located in North Carolina use NC-RETS to provide those meter readings on an on-going basis. NC-RETS uses those meter readings to create one REC for each qualifying MWh of energy produced by a Renewable Energy Facility.<sup>4</sup>

Balancing Authorities (Duke Energy and Progress Energy) that provide energy balancing and accounting at the transmission level, use NC-RETS to upload monthly production data for Renewable Energy Facilities that are interconnected to their transmission systems.

## 2.2 Establishing an Account

Any person or entity wanting to participate in NC-RETS must establish an Account. Accounts should be established in accordance with the timeline for certificate creation (see Section 6.2) to ensure Certificate eligibility.

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<sup>2</sup> Some municipal utilities and electric membership corporations (EMCs) have contracted with a power agency, GreenCo Solutions, Duke Energy, or Progress Energy, to act as a Utility Compliance Aggregator that will manage and report compliance with the Portfolio Standard on behalf of that municipal utility or EMC.

<sup>3</sup> If a facility already participates in PJM's Generation Attribute Tracking System (GATS), it does not need to also participate in NC-RETS. This may be the case if the facility is located in Dominion's service territory.

<sup>4</sup> "Qualifying MWh" is one that was produced by a fuel that qualifies under Session Law 2007-397 at a facility that has been registered with the Commission as a Renewable Energy Facility. NC-RETS does contain the functionality to apply multipliers in exceptional cases such as the Duke off-shore wind turbines, where one MWh will create more than one REC.

Registrants will provide basic Account registration information, such as Account Holder name, address and contact information, to the NC-RETS Administrator through a secure web-page on the NC-RETS website<sup>5</sup> and agree to the Terms of Use. (The Terms of Use are available for review on the NC-RETS website, [www.ncrets.org](http://www.ncrets.org), under “Documents.”) See [Appendix A](#) for step-by-step instructions. The NC-RETS Administrator reviews the Account application and may request more information before approving or rejecting the application. An Account remains active until terminated. Termination can be initiated by the Account Holder by notifying the NC-RETS Administrator. Accounts can also be terminated if an Account Holder fails to pay the NC-RETS fees or is otherwise in default under the Terms of Use. The Terms of Use describe these issues, as well as additional important terms, and should be read and understood by anyone applying to be an Account Holder.

### **Account Types and Sub-Account Structure**

There are four (4) types of Accounts in NC-RETS:

- **North Carolina Electric Power Supplier Account:** This type of Account can hold, transfer (outgoing and incoming), and Retire Certificates. A North Carolina Electric Power Supplier Account can also register and maintain Projects and have Certificates issued to it for its Projects, including energy efficiency and demand side management programs. A North Carolina Electric Power Supplier Account is the only type of Account that can retire Certificates for compliance with NC’s Portfolio Standard. An organization that provides compliance services for another Electric Power Supplier is called a Utility Compliance Aggregator. Only Electric Power Suppliers and Utility Compliance Aggregators are eligible to establish a North Carolina Electric Power Supplier Account.

In 2010, when North Carolina Electric Power Suppliers (and Utility Compliance Aggregators) first register to open an Account in NC-RETS, they will be required to input (on the Account registration screen) their organization’s 2009 North Carolina retail sales (in MWh). As soon as NC-RETS generates the Account Holder’s first NC-RETS bill on September 1, 2010, the Account Holder’s “prior year retail sales” field will be locked. NC-RETS will use the locked sales data to calculate bills from September 2010 through June 2011. In June of 2011 and each subsequent year, the Account Holder must enter the “prior year’s retail sales” data. Each July NC-RETS will use the new sales data to calculate monthly bills for North Carolina Electric Power Suppliers. For more details, please refer to the Fee Schedule, which is on-line at [www.ncrets.org](http://www.ncrets.org).

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<sup>5</sup> <http://www.ncrets.org>

- **General Account:** This type of Account can register Projects and have RECs issued to it for its Projects. (Before creating Certificates in NC-RETS, a Renewable Energy Facility must first register with the Commission.) A General Account can hold, transfer, and Retire Certificates (for reasons other than compliance with NC's Portfolio Standard). The Account Holder for a Renewable Energy Facility Project can seek eligibility for its facility with Green-e Energy or Low-Impact Hydro Institute (LIHI). If accepted by those organizations, NC-RETS can indicate such eligibilities on Certificates issued for output from the facility.
- **Qualified Reporting Entity (QRE) Account:** An Account Holder with a QRE Account is assigned to a Project and is responsible for providing energy production information such as monthly meter readings for that Project. A QRE Account cannot hold Certificates. The QRE uses its NC-RETS Account to upload meter reads or monthly settlement data for each Project to which it is assigned. An Electric Power Supplier should have a QRE Account if it reads the production meter for Renewable Energy Facilities, or if it is a Balancing Authority.
- **Program Auditor Account:** This type of Account will allow Commission and Public Staff to perform compliance review and auditing of program data as needed.

Accounts that can hold Certificates (North Carolina Electric Power Supplier and General Accounts) are given three types of Sub-accounts automatically by default when their Account is approved (Active, Retirement and Export Sub-accounts). An Active Sub-account is used to organize Certificates based on an organization's business structure as desired. The default Retirement Sub-account is used to Retire Certificates for voluntary reasons (that is, reasons other than compliance with NC's Portfolio Standard). The Export Sub-account is used to transfer Certificates to another tracking system. The Account Holder has the ability to rename these default Sub-accounts and create as many additional Active and Retirement Sub-accounts as necessary to meet their organization's needs. Retirement Sub-accounts cannot be renamed if they hold Certificates. When Certificates are issued, they are placed into an Active Sub-account that was designated when the Project was registered with NC-RETS. When an incoming Certificate transfer is pending, the recipient Account Holder identifies the Active Sub-account into which the Certificates will be deposited. Each Account Holder will be able to view a listing of Certificates held in each Sub-account and their attributes (e.g. static Project details, eligible program certifications and Certificate origination details).

Accounts that can hold Certificates also have a single Bulletin Board Sub-account, used to post Certificates for sale on the NC-RETS Bulletin Board.

Each Account and Sub-account has a unique identification number. For ease of reference, Account Holders may attach aliases to Sub-accounts (e.g., by customer or by product name).

North Carolina Electric Power Suppliers and Utility Compliance Aggregators will have the ability to create Compliance Sub-accounts. Compliance Sub-accounts can only be used to Retire Certificates for the Portfolio Standard. A Compliance Sub-account is established for a specific compliance year, and the Account Holder must designate whether the Sub-account is subject to the compliance obligations of an electric public utility or the compliance obligations of a municipality / electric membership corporation or a group of municipalities / electric membership corporations.

### **2.3 Deposits to Active Sub-Accounts**

There are four ways that Certificates are deposited into an Active Sub-account.

- (a) Within an Account, Certificates can be transferred from one Active Sub-account or Bulletin Board Sub-account to another.
- (b) An Account Holder can accept a transfer of Certificates from another Account Holder.
- (c) Certificates can be generated by a Project and deposited by the NC-RETS Administrator into the Sub-account assigned to the Project.
- (d) Certificates can be transferred into a Compliance Sub-account prior to the Compliance Sub-account being submitted for review by the Commission and Public Staff.

### **2.4 Transfers from Active Sub-Accounts**

There are two ways to withdraw or remove Certificates from Active Sub-accounts:

- (a) Transfer the Certificates to the Sub-account of another Account Holder.
- (b) Transfer the Certificates to another of the Account Holder's own Sub-accounts (Active, Retirement, Export, Compliance, or Bulletin Board Sub-account).

Certificates that have been deposited in a Compliance Sub-account cannot be moved out of that Sub-account once the Electric Power Supplier or Utility Compliance Aggregator submits the associated Portfolio Standard Compliance Report to the Commission for review.

## 2.5 Retirement Sub-Accounts

A Retirement Sub-account is used as a repository for Certificates that the Account Holder wants to designate as voluntarily retired. There are three ways that Certificates are deposited in a Retirement Sub-account:

- (a) Within an Account, Certificates can be transferred from an Active Sub-account or a Bulletin Board Sub-account to a Retirement Sub-account.
- (b) An Account Holder can accept a transfer of Certificates from another Account Holder directly into a Retirement Sub-account.
- (c) Certificates can be transferred from a Compliance Sub-account to a Retirement Sub-account prior to the Compliance Sub-account being submitted for review by the Commission and Public Staff.

An Account Holder choosing to retire a Certificate or a block of Certificates will use the transfer screen to identify the quantity of Certificates to Retire and the reason for Retirement. The Account Holder must select the Retirement Sub-account to which the Certificates will be deposited. The Retirement Sub-account will show the Serial Numbers of the Certificates Retired, the date of Retirement and the reason for Retirement. In addition, there will be a mechanism to view the Project characteristics and Certificate fields associated with the Retired Certificates. *Once Certificates are Retired, they cannot be moved or transferred out of the Retirement Sub-account to any other Sub-Account or Account Holder.*

NC-RETS validations ensure that Certificates deposited in a Retirement Sub-account are no longer transferable to another party or another Sub-account. NC-RETS reports allow Account Holders to show evidence of the Retirement.

## 2.6 Compliance Sub-Accounts

A Compliance Sub-account will be available to North Carolina Electric Power Suppliers and Utility Compliance Aggregators only. These entities can have one electric public utility Compliance Sub-account per compliance year and an unlimited number of municipal utility / electric membership corporation type of Compliance Sub-accounts per year. For example, for 2010, an Electric Power Supplier can have one Compliance Sub-account for itself (as an electric public utility) and 1 or more for each municipality/coop or group of such electric power suppliers for which it provides compliance reporting. Each Compliance Sub-account will be subject to the statutory requirements for either: 1) an electric public utility, or 2) a municipal utility/electric membership corporation (cooperative). Certificates in a Compliance Sub-account will be in a “pending retirement status” while the State Program Auditor/Regulator accesses it via a compliance report for audit. When that review and the related regulatory proceeding are complete, the Commission will use

NC-RETS to finalize Retirement of the Certificates into a permanent Retirement status. State Program Auditors will see the related Compliance Report from their own Accounts.

There are two ways that Certificates are deposited into a Compliance Sub-account:

- (a) Within an Account, Certificates can be transferred from an Active Sub-account or a Bulletin Board Sub-account to a Compliance Sub-account.
- (b) An Account Holder can accept a transfer of Certificates from another Account Holder directly into a Compliance Sub-account.

The NC-RETS Administrator is not responsible for the Retirement of Certificates by Account Holders, as it relates to voluntary or compliance-related Retirement deadlines or otherwise.

## **2.7 Transfers between Accounts**

North Carolina Electric Power Supplier and General Account Holders may transfer Active Renewable Energy Certificates to other Account Holders. Certificates will be specified by their Serial Numbers. The Account Holder will select the recipient from a pull-down list of Account Holders. After the transfer has been initiated, the Certificates that are pending transfer will be marked as “transfer pending” in the Account Holder’s Outbox. This will have the effect of “freezing” the Certificates so that they cannot be moved to another Sub-account or to another Account Holder.

After the transfer has been initiated, NC-RETS will send an electronic notification of the request to transfer Certificates to the proposed recipient. The transfer recipient can review the Certificate transfer details from the Account Holder’s Outbox and must confirm or reject the transfer within fourteen (14) calendar days of when it was requested by the transferor. If rejected, the Certificates will be deposited back into the originating transferor’s Sub-account. If confirmed, the transfer recipient must designate the Sub-account to which the Certificates are to be delivered. As soon as the recipient has confirmed or rejected the transfer, NC-RETS will send an electronic notification to the transferor indicating the action taken. The transferor may cancel any transfer before such transfer has been confirmed by the recipient by withdrawing the transfer from the Account Holder’s Outbox in NC-RETS. If the transfer is withdrawn, NC-RETS will notify the recipient of the action.

## **2.8 Compatible Tracking Systems**

NC-RETS is set up to accept transfers of eligible Certificates from compatible tracking systems. A compatible tracking system is a system that has set-up up a process with NC-RETS on how to handle imports and/or exports and

implemented the required technology. NC-RETS is working towards setting up imports and exports with all registries that track generation from facilities that have been approved by the NC Commission. Appendix F lists the compatible tracking systems at the time of NC-RETS launch. This list is also posted at [www.ncrets.org](http://www.ncrets.org) and will be updated as more registries are deemed to be compatible.

### 2.8.1 Imports from other Tracking Systems

Only Certificates from facilities and fuel types that have been approved by the Commission can export Certificates to NC-RETS. In order to import a Certificate from another tracking system the Account Holder in the exporting tracking system will need to follow that tracking system's procedures for an export. This generally includes designating a specific batch of Certificates for export and designating the importing registry (i.e. NC-RETS) and the importing NC-RETS Account Holder (Account ID and name).

The NC-RETS Account Holder will see the imported Certificates in their Inbox module. Under the "From" column, with the registry from which the RECs are coming will show in the Inbox module. a note stating that these are import Certificates. The Certificate transferor will be the NC-RETS Administrator.

The imported Certificates will have a unique Serial Number that references the originating registry instead of NC-RETS. The Certificate data screen will also contain the original Serial Number from the issuing registry. All Projects from which Certificates have been imported into NC-RETS will be listed on the public 'Imported Facility Report.' No information about the quantity transferred and the parties involved in the transaction will be publicly posted.

Tracking systems track fuel types differently. Certificates in NC-RETS will issue with the fuel types used by NC-RETS and that correspond to fuel types approved by the Commission.

#### 2.8.1.1 Multi-fuel Facilities that use Swine and/or Poultry Waste

Only NC-RETS and the North American Renewables Registry (NAR) currently can track swine waste and poultry waste Certificates separately from other kinds of biomass used in a Multi-fuel Facility. If a NC-RETS Account Holder is planning to import Certificates from a Project that is (1) registered in a tracking system other than NAR, and, (2) using more than one type of biomass, and, (3) where one or more of the fuels is swine and/or poultry waste, then additional procedures are needed to correctly differentiate swine and/or poultry

waste Certificates from other biomass Certificates. NC-RETS Account Holders contracting for such Certificates should contact the NC-RETS Administrator before the export is initiated from the exporting tracking system. The NC-RETS Administrator and the Commission will ask the NC-RETS Account Holder for Project specific information (i.e. fuel deliveries, generation data etc.) needed to substantiate that swine and/or poultry waste generated the energy associated with the RECs.

If the Project only uses one biomass fuel (i.e. swine waste or poultry waste) the above procedure is not needed.

### **2.8.2 Exports to other Tracking Systems**

In order to export a Certificate to another tracking system the NC-RETS Account Holder will designate a specific batch of Certificates for export and designate the registry and Account Holder (Account ID and Name) to whom the Certificates should be delivered.

After the transfer has been initiated, it will show up in the NC-RETS Account Holder's Outbox module as "Pending." It will remain "Pending" until the NC-RETS Administrator confirms that the Certificates are eligible for export to the importing tracking system.

## **3 Access to Accounts and Confidentiality**

### **3.1 Account Access**

An Account Manager is established as part of the Account registration process. The individual listed in the initial Account application will be considered the Account Manager and have the ability to setup and manage any additional User logins and login privileges for his or her organization. The Account Manager will have full access to the organization's Account. The Account Manager can customize login permissions to allow view-only access to information or to allow the User to perform activities such as transfers and submitting/updating information. Such privileges can also be further attached to specific Sub-accounts or Projects. This provides Account Holders with significant flexibility when assigning Users to specific tasks or roles. User login setup can be done during the Account registration process or at any time the Account Manager wishes to add Users to the Account. The Account Manager supplies contact information for each User and designates their login name and password.

**NOTE:** The NC-RETS Terms of Use shall apply to any person who receives access to an NC-RETS Account or Sub-account from an Account Holder or Account Manager.

Once a User login is established, NC-RETS sends an email to the login contact specified by the Account Manager with details on the individual's login name. The Account Manager is required to communicate the password to the new User. Upon logging into NC-RETS for the first time, the new User is prompted by NC-RETS to change his or her password. The new User can then perform the functions or view the information per the permissions granted by the Account Manager. The Account Manager or NC-RETS Administrator may at any time remove or add permissions to a User by using the Account administration screens.

The NC-RETS My Event Log report tracks and displays all actions performed within the Account by login name and timestamp. Account Managers have access to the My Event Log report for their Account and Sub-accounts.

### **3.2 Levels of Account Access**

When an Account Holder creates logins for additional Users, the Account Holder assigns to the User one of two levels of specific access rights:

#### **3.2.1 Account Holder – Supervisor**

When completing the login profile for a new User, the Account Manager can assign them “Account Holder – Supervisor” privileges. Such a new User is able to register Projects, manage Certificates, and create additional logins, if necessary. The Account Manager can also give this User a subset of these privileges if needed.

#### **3.2.2 Account Holder – View Only**

When completing the login profile for a new User, the Account Manager can assign the User “Account Holder – View Only” privileges. This provides the User with limited view rights. The Account Manager will then identify the specific Sub-accounts and Certificates that the User will be able to access and view.

### **3.3 Confidentiality**

As stated in the Privacy Policy [[www.ncrets.org](http://www.ncrets.org)] and the Terms of Use, certain Account information is held confidential. Account information is only used and released by NC-RETS in aggregate through the public reporting process.

## **4 Project Registration**

Within NC-RETS and all related NC-RETS documents, the term “Project” is used to refer both to (1) a generating Project, which is a Renewable Energy Facility registered with the Commission, accepted by the NC-RETS Administrator and for which NC-RETS issues Certificates, and (2) an energy efficiency Project, which is registered with NC-RETS by an Electric Power Supplier for its energy

efficiency or demand-side management programs, or a Utility Compliance Aggregator on behalf of an Electric Power Supplier. (Note: only municipal utilities and electric membership corporations can use their demand-side management programs for Portfolio Standard compliance.) Once a Project is registered within NC-RETS, monthly production data or annual energy savings can be uploaded to NC-RETS to create Renewable Energy Certificates or Energy Efficiency Certificates. Step-by-step instructions for registering a Project can be found in [Appendix B](#).

#### **4.1 Registering a Project**

To ensure that double-counting does not occur, Renewable Energy Facilities registered in NC-RETS must have 100% of their output tracked by NC-RETS (with the exception of imported Certificates). If a Renewable Energy Facility or an associated contract for its production was registered in another tracking system at one point, the NC-RETS Administrator should be notified of this during the registration process and the Account Holder should be prepared to provide documentation to prove the Renewable Energy Facility (and, if applicable, its associated contracts) have been removed from the previous tracking system.

The owner, or Responsible Party, of a Renewable Energy Facility must first establish an Account within NC-RETS as described above and then register a Project as a Renewable Energy Facility or an Energy Efficiency Project, as the case may be, before NC-RETS can certify and issue Certificates attributable to it. The Account types that can register Renewable Energy Facilities are the NC Electric Power Supplier Account and the General Account. Only the NC Electric Power Supplier Account can register energy efficiency Projects in NC-RETS.

To register a Renewable Energy Facility or an energy efficiency Project (which would include DSM programs), the owner or the Responsible Party must:

- Have an approved Account in NC-RETS;
- Have registered with the Commission and received approval from the Commission for the Renewable Energy Facility; and
- Submit a completed on-line registration form containing information related to the characteristics of the Renewable Energy Facility or energy efficiency Project. (Note: Many Electric Power Suppliers will have several energy efficiency programs – their energy savings will be uploaded into one Project.)

The NC-RETS Administrator will review the information provided and request additional information as needed before approving a Renewable Energy Facility registration request in NC-RETS.

## 4.2 Multi-fuel Renewable Energy Facility Project

A Multi-fuel Renewable Energy Facility Project is one that produces energy using more than one Fuel Type. A Multi-fuel Renewable Energy Facility Project can use a renewable fuel with a fossil fuel or use multiple types of renewable fuels. Such facilities must register with NC-RETS as a Multi-fuel Renewable Energy Facility Project. If the relative quantities of energy produced from each fuel cannot be measured or calculated, and verified, the facility is not eligible to register as a Multi-fuel Renewable Energy Project in NC-RETS.

Each Certificate issued for a Multi-fuel Renewable Energy Facility Project will reflect only one Fuel Type. The total number of Certificates issued for a Fuel Type in a reporting period will be proportional to the energy output from that Fuel Type for that reporting period.

Each NC-RETS Account Holder or Responsible Party that has registered a Multi-fuel Renewable Energy Facility Project must report monthly to the NC-RETS Administrator the proportion of energy output per Fuel Type, by MWh or Btu, generated by the Multi-fuel Renewable Energy Facility Project during that month, calculated according to the applicable provisions of Section 5.9.1. Though energy produced from all Fuel Types must be reported, NC-RETS will only issue Certificates for the qualified renewable energy. Certificates will not be issued until such information is provided by the Account Holder or Responsible Party.

The procedures and methodologies used by the Account Holder or Responsible Party to calculate the contribution of each Fuel Type should be retained by the Account Holder or Responsible Party according to Commission rules, and will be subject to audit by the Public Staff and the Commission.

To import Certificates from multi-fuel generators, see Section [2.8.1](#).

## 4.3 Verification of Static Data Submitted During Project Registration

Upon completion of the Renewable Energy Facility Project registration process, the NC-RETS Administrator will review attestations, Energy Information Administration reports and other data sources to verify the information provided by the Account Holder.

In the event data submitted is found to be incorrect or if there is a discrepancy between the information submitted during the on-line registration process and the materials provided to verify the information, the NC-RETS Administrator will notify the registrant that the information could not be positively verified. A process of either correcting the registration form, or withdrawing the

registration form, or providing proof that the information on the registration form is correct will ensue between the NC-RETS Administrator and the registrant until the NC-RETS Administrator is satisfied that the information provided meets NC-RETS standards for accuracy. If any issues arise, the NC-RETS Administrator will raise them with the Public Staff in case a site visit is needed to verify the legitimacy of Project registration and generation data.

#### 4.4 Updating Static Data

After the initial Project registration in NC-RETS, Account Holders should continually notify NC-RETS of the following actions or occasions that will have the effect of changing Static Data tracked by NC-RETS:

- (a) A change in Fuel Type for a Renewable Energy Facility, and the date on which the change occurred, within ~~thirtyfifteen~~ (3015) calendar days from when the change is implemented. (The Account Holder should also notify the Commission, referencing the docket number from its registration order.)
- (b) A change in Project ownership, and the date on which the change occurred, within ~~thirtyfifteen~~ (3015) calendar days after the change occurs. A change in ownership must be confirmed by a letter signed by both the prior and new owners of the Project, and provided to the NC-RETS Administrator. Neither NC-RETS nor the NC-RETS Administrator will be responsible for depositing Certificates into an Account that no longer represents a Project if the incorrect deposit occurs as a result of a lack of notification by the prior and new owners of the Project. Parties should arrange for a meter-reading to occur coincident with the ownership change. This meter read will be used to determine the final REC issuance to the original owner. Subsequent production data will be used to generate RECs that will be issued to the new owner. (A facility owner must notify its QRE of any change of ownership. A new owner must also register the facility with the Commission.)
- (c) A change in a Project's eligibility for any programs or certification tracked by NC-RETS. This must be communicated by the Account Holder before any Certificates affected by the change are issued or within ~~thirtyfifteen~~ (3015) calendar days after the change occurs, whichever is sooner.
- (d) A change to any of the "essential generating characteristics" of the Project.

#### 4.5 Misrepresentation of Static Information:

Account Holders can be removed from NC-RETS for cause, including misrepresentation of Static Data. NC-RETS reserves the right to withhold issuing Certificates, to freeze a Sub-account or Account associated with a particular Project, or to withhold participation in NC-RETS for Projects that

have willfully misrepresented Static Data. If the NC-RETS Administrator has cause to suspend the Project's participation in NC-RETS, no Certificates will be created while the Project is under suspension. While under suspension, metering data may continue to be uploaded to the Project by the QRE but it will not contribute to Certificate creation. Upon removal of the suspension, Certificate issuance can proceed.

#### **4.6 Terminating a Project's Participation in NC-RETS**

If a Project's owner or Responsible Party wants to remove a Project from NC-RETS, they can do so by notifying the NC-RETS Administrator and specifying the following:

- (a) The date the Project should be/will be removed from NC-RETS;<sup>6</sup>
- (b) The name of the Project's Qualified Reporting Entity, if applicable; and
- (c) The Sub-account to which Certificates should be deposited (if the usual Account for deposit is being closed as well).

NC-RETS will issue Certificates for a Project up to the date of Project termination as instructed by the Project's owner or Responsible Party. No Certificates will be issued for adjustments that occur after the termination date. If the Account to which the Project is linked is also closed at the same time, the Project's owner or Responsible Party must also specify the Account to which any remaining Certificates that have not yet been issued should be deposited. Failure to do so will result in loss of Certificates.

#### **4.7 Changing the Account (Owner) with which a Project is Associated**

If the Project's owner or Responsible Party wants to change the Account with which a Project is associated, they can do so by notifying the NC-RETS Administrator and providing the information requested by the NC-RETS Administrator, including, but not limited to:

- (a) The new Account number with which the Project will be associated;
- (b) The date the change will be effective; and
- (c) Any documentation required for legal purposes or to meet certification requirements.

Certificates from the Project that were created up to the day the Account change takes effect will remain in, or be deposited into, the Account that the Project was associated with at the time the generation occurred. For example, if a Project's owner changes the Account with which the Project is associated from Account A to Account B, and the change is effective on March 1,

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<sup>6</sup> This is the same as the final date of generation for which Certificates are to be issued.

then the Certificates relating to generation that issued prior to March 1 will be deposited into Account A. Any issuance from the Project after March 1 will go into Account B.

The NC-RETS Administrator will need written confirmation of this change from both parties involved in the Project transfer in order to implement the change. When changing the Account with which a Project is associated, there cannot be any time when the Project is not associated with an Account. If there is such a lapse, this will be treated as a deregistration/re-registration of the Project instead of a change of Account. (Note: Project owners also need to inform the Commission of a change in ownership, referencing the docket number that the Commission assigned to their registration order.)

## **5 Dynamic Data in NC-RETS – Generation Data – Role of Qualified Reporting Entity**

### **5.1 Qualified Reporting Entity (QRE) Guidelines**

A QRE is a Balancing Authority, an Electric Power Supplier, or a federal or municipal power agency. They provide production data to NC-RETS for Renewable Energy Facilities at least monthly. A Balancing Authority provides data consistent with its monthly settlements process. Other QREs provide data from routine meter readings. Each QRE adheres to the following guidelines:

1. A QRE that must also comply with the Portfolio Standard shall demonstrate that its employees who are responsible for reporting facility production data are separated organizationally from its employees who are responsible for Portfolio Standard compliance. “Separate from” means that the QRE employee(s) work in a separate department, division, section or unit that is not responsible for planning for, demonstrating or assuring Portfolio Standard compliance. The NC-RETS Administrator may make exceptions for extremely small Electric Power Suppliers after consulting with the Commission. However, in no event shall the employee who creates or uploads production data be the same employee who uses NC-RETS for compliance purposes.
2. A QRE creates a QRE Account in NC-RETS. The NC-RETS Administrator will validate the application information that it submits.
3. Upon approval, each QRE is added to the list of QREs available for selection by a Project. Upon registration, a Project will have to provide a unique ID that is assigned by the QRE, which links its facility to the QRE. NC-RETS will provide each QRE with a list of the Projects that have selected it. When a new Project selects the QRE, the QRE will be notified via e-mail.

4. A QRE will at least monthly provide electricity production data to NC-RETS that is inherently reliable and auditable. If the meter-read period spans parts of two months, the QRE shall assign the usage to the later month.
5. Reported electricity production data shall be financial settlement quality data from revenue quality meters, which would include those that meet ANSI-12 standards.
6. Each QRE shall upload data to NC-RETS. The QRE must use a valid active NC-RETS login and password associated with its NC-RETS QRE Account. After logging into the Account, the QRE Account Holder should locate the Meter Data Loading module. To locate the desired generation output file, the User selects the Meter Data Loading module's "browse" button to display a pop-up screen where the User can locate the desired file on computer or network drives. After selecting a file, the User selects the "Year" and then the "Upload Now" button to upload the file. The file must be formatted in ASCII Text with data fields delimited by commas (Comma-Separated Value (CSV) format).

The following example shows a conforming input file.

```

NC-RETSPROJECTID,REPORTINGENTITYID,VINTAGE,FROMDATE,TO
DATE,TOTALMWH
114,2A58A68,08/2010,08/01/2010,08/31/2010,100
  
```

The fields are as described in the following table:

Field Name	Data Type	Description
NCRETSPROJECTID	Integer	Unique NC-RETS identifier for the Project assigned by NC-RETS upon Project approval.
REPORTINGENTITYID	Integer and Character(50)	Unique identifier for the Project assigned by its QRE from the QRE's internal systems.
VINTAGE	Numeric Character(7)	Month and year of production, formatted as MM/YYYY for any month in the current reporting period

FROMDATE	Numeric Character(10)	Begin month-day-year of production output period formatted as MM/DD/YYYY
TODATE	Numeric Character(10)	End month-day-year of production output period formatted as MM/DD/YYYY
TOTALMWH	Floating decimal	Total MWhs for reporting period, with three spaces beyond the decimal

A current period output file can be loaded as many times as needed adhering to the following restrictions. (1) After an Account Holder has explicitly accepted the posted output data, NC-RETS will not accept re-loaded data for the same production period. NC-RETS will reject an attempted re-loaded. If the Account Holder has not yet accepted, the QRE can re-load the data, the previous data will be over-written and the Account Holder will receive notification of new data being posted. Otherwise, the QRE should contact the NC-RETS Administrator, who can re-load the file if it is appropriate to do so. (2) If NC-RETS has accepted the data or the Account Holder has disputed the data, and no Certificates have yet issued, a QRE can re-load the data. In all other instances, the QRE should work with the NC-RETS Administrator if it believes data needs to be re-loaded.

NC-RETS will validate a Project's uploaded data before posting the output into the NC-RETS data base. When all validations<sup>7</sup> are successfully completed, the data is loaded into the database and can be seen in a Project's Generation Activity Log. If the Project fails to produce energy in a given month, a QRE should report by uploading "zero" to be accepted by the Account Holder. NC-RETS then notifies the Account Holder via email that generation output has been loaded for the Project, and the data is available to be reviewed for approval or dispute.

## 5.2 Generation Data Requirements

NC-RETS will not create Certificates for generation supplying Station Service. Data used to issue Certificates for Renewable Energy Facilities must be derived from a Qualifying Meter or Qualifying Estimate and communicated to the NC-RETS Administrator.

For Renewable Energy Facilities whose output is settled monthly by a Balancing Authority, a "Revenue-Quality Meter" is the data source used by

<sup>7</sup> Validations include correct assignment of QRE, assessment of engineering feasibility of output, potential overlap of reporting period with prior uploads, data exceeds ~~34~~<sup>35</sup> days reported for a given vintage, and whether data for a previous period remains subject to dispute.

the Balancing Authority for settlements. The data must be electronically collected by a meter data acquisition system, such as an MV-90 system, or pulse accumulator readings collected by the Balancing Authority's energy management system, and verified through a Balancing Authority checkout/energy accounting or settlements process that occurs monthly. The preferred source for the data is a meter data acquisition system. If the Balancing Authority does not have an electronic source for collecting revenue meter data, then manual meter reads will be accepted.

When a QRE submits generation data (either manually entered or uploaded via file) NC-RETS validates the data to verify its engineering feasibility. To perform the validation, NC-RETS uses the following required variables from the Generating Project Registration screen:

- Nameplate Capacity
- Capacity Factor or Maximum Annual Energy

Data validation is performed for both current period reporting and Prior-Period Adjustment reporting, regardless of whether the data is loaded as a file or entered-manually in the Project's Self-Reporting Interface. To determine the feasibility of the submitted data, NC-RETS will use the following equations:

For those Projects with a registered "Capacity Factor":

$$(\text{Nameplate Capacity}) * (\text{Capacity Factor}) * (\text{number of hours in the duration}) * (1.02)$$

For those Projects with a registered "Maximum Annual Energy":

$$(\text{maximum annual energy}) / (8760 \text{ hours in a year}) * (\text{number of hours in the duration}) * (1.02)$$

The number of hours in the duration is based on the duration of the generating period each time the information is reported on the Project. To determine the duration value, NC-RETS will calculate the number of hours in the generating period (for example, the number of hours in the generating period with a Begin Date of January 1, 2006 and an End Date of January 31, 2006 would be 744). The 1.02 will allow for a margin of error.

If the validation is successful, and the reported energy production is less than or equal to the maximum feasible generation for the facility, the data becomes available to the Account Holder to review and then accept, or dispute. If the Account Holder accepts the data, it will be included in the next Certificate issuance cycle. For Prior-Period Adjustments, the data will contribute to the next Certificate issuance after it was accepted (either by the Account Holder, or auto-accepted by NC-RETS).

If the loaded data fails the engineering feasibility validation, the QRE will be prompted with a "soft" warning as to the failed validation. The QRE has the

ability to continue posting the data by selecting the “continue” button on this pop-up screen. If the QRE wishes to continue posting data, NC-RETS will send an automated email to both the NC-RETS Administrator and the Account Holder that the data loaded for their Project has failed the engineering feasibility validation, but that the QRE has decided to have the data posted to the database anyway. The notification will also state that the data has a status of “NC-RETS Pending” until either corrected, or approved by the NC-RETS Administrator. Data with this status will not contribute to Certificate creation. The QRE can instead decide to not post the data to the database as a result of the failed validation by selecting the “cancel” button on this same pop-up screen. Selecting cancel will discontinue the data loading process for the Project in question and no notifications will be sent.

For all loaded data, the NC-RETS Administrator will have a report “Engineering Feasibility Estimate Calculations Report” which will list all Projects that have had data loaded, the amount of output loaded, and the feasibility pass/fail result.

**NOTE: Failed validation for a single facility does not result in a failure to load the entire file – only the data for the facility that failed the validation.**

### **5.3 Measurement of Generation and Adjustments**

The output from each Renewable Energy Facility Project registered in NC-RETS will be measured at the point of interconnection to the transmission or distribution company’s facility. Losses occurring on the bulk transmission or distribution systems after the metering point are not reflected in the Certificates created. NC-RETS will not create Certificates for that portion of the generation that is used to supply Station Service, and therefore, generation data should also be netted of Station Service supplied from the generator’s side of the point of interconnection. For Renewable Energy Facilities also serving onsite loads, NC-RETS will create Certificates for the on-site load distinct from Station Service, if the facility’s owner or Responsible Party can provide evidence that the metering used is capable of distinguishing between on-site load and Station Service. If adjustments are needed, due to metering, reporting, error or any other reason, the QRE must report the adjustment as soon as possible to the NC-RETS Administrator. If Certificates have not yet been created for the original generation amount to which the adjustment applies, the Certificate or debit will be posted to the Generation Activity Log, and will be reflected in the number of Certificates created. If Certificates have been created, the adjustment will be treated as a Prior Period Adjustment described below in Section 5.4.

### **5.4 Prior Period Adjustments**

Adjustments can be requested by an Account Holder, including Self-Reporting Facilities, or a QRE, after the data is reported and used to

issue Certificates in NC-RETS. These adjustments are known as Prior Period Adjustments. The Account Holder accesses the Project Output Data Review screen to submit an adjustment to the NC-RETS Administrator. If accepted by the NC-RETS Administrator, the Certificate or debit to the generation volume reported in the current month will post to the Generation Activity Log. Consequently, the adjustment will be realized when Certificates are next issued. If new Certificates are created, the vintage of the Certificates shall reflect the actual generation period. NC-RETS will not accept adjustments for generation reported more than one year prior.

## **5.5 Notification of Adjustments**

The Account Holder will be informed of all positive or negative adjustments once the adjustment has been posted to the Generation Activity Log. Once NC-RETS informs the Account Holder of a need for adjustment, the Account Holder then has fourteen (14) calendar days to dispute or accept the adjustment. If after fourteen (14) days the Account Holder has failed to respond, the NC-RETS Administrator will automatically accept and create the adjustment.

## **5.6 Data Collection Procedure**

Energy-generation data should be reported within 30 days of the meter read and will be accepted by the NC-RETS Administrator on an ongoing basis. Currently, NC-RETS can accommodate data in batches that contain up to 35 days of production data. ~~[In order to conform to Commission rules, the NC-RETS Administrator will pursue changes such that NC-RETS will be able to accommodate 35 days worth of production data.]~~ Data files are to be electronically transmitted to NC-RETS using a secured protocol and a standard format specified by the NC-RETS Administrator. The data shall reflect, at a minimum, the month and year of the generation, monthly accumulated MWhs for each NC-RETS Project ID and the associated NC-RETS and Project ID(s) for each Project. The owner of the Generating Project, as the owner of the metered data, or the Responsible Party, has the responsibility to direct the QRE to release generation data to NC-RETS.

The data must be transmitted by a single entity, which must be either (1) a QRE Self-Reporting Facility.

## **5.7 Special Requirements for Self-Reporting Facilities Only**

A Self-Reporting Facility must enter actual cumulative meter readings measured in kWh / MWh or Btu (which will be converted to MWh) and the date of the meter reading via the Self-Reporting Interface. Actual cumulative meter readings must be entered no less frequently than annually. If a Self-Reporting Generator chooses to report data in cumulative over the course of multiple months (for example, 01/2010-06/2010), it can do so by uploading the data for the most recent vintage month (06/2010) and providing

evidence of the monthly breakdown quantity to the NC-RETS Administrator. Self-Reporting Facilities that do not enter meter readings via the Self-Reporting Interface as required will receive a reminder notice by email from the NC-RETS Administrator. Self-Reporting Facilities risk having their Project de-activated in NC-RETS if they do not provide meter readings at least annually.

## 5.8 Generation Activity Log

Each Project registered in NC-RETS will have a Generation Activity Log associated with it. The Generation Activity Log is an electronic ledger where generation is posted prior to Certificate creation. Each time generation data is received by NC-RETS for a particular Project, the date and quantity of MWh is posted to the Generation Activity Log. Similarly, adjustments received will be posted likewise. The status of each entry in the Generation Activity Log will be noted, where the possible values are:

- **NC-RETS Accepted:** This label is used for all generation that has been reported to NC-RETS, has passed the NC-RETS feasibility test and has been logged to the Generation Activity Log, but has not yet been accepted (or disputed) by the Account Holder.
- **NC-RETS Pending:** The NC-RETS Administrator is waiting for the resolution of a situation before the Certificates can be issued. For example, if the NC-RETS Administrator is waiting to receive a Fuel Type allocation from a Multi-fuel Generation Project or other update from a Generating Unit.
- **Account Holder Accepted:** The Account Holder has accepted the posted generation, but the Certificates have not yet been issued.
- **NC-RETS Admin Accepted:** The NC-RETS Administrator has accepted the posted generation, but the Certificates have not yet been issued.
- **Account Holder Disputed:** The Account Holder has disputed the posted amount of generation.
- **NC-RETS Admin Disputed:** The NC-RETS Administrator has disputed the posted amount of generation.
- **Certificates Created:** Certificates have been created.

The status of each entry in the Generation Activity Log will be changed consistent with the information received by the NC-RETS Administrator. Certificates will be issued based on the total whole number of MWh on the Generation Activity Log that are marked "Account Holder Accepted." Only Certificates that are marked as such will contribute to Certificate creation. Any fractional MWh will be rolled forward until sufficient generation is accumulated for the creation of a Certificate. Each time an item is posted to the Generation Activity Log, the Account Holder will be notified electronically.

Account Holders will have fourteen (14) calendar days to accept or dispute any new regular entries to the Generation Activity Log and fourteen (14) days to accept or dispute adjustments. If the Account Holder does not respond, the posting will be automatically accepted after the specified period and Certificates issued.

The Generation Activity Log will include, at minimum, the following entries:

- (a) Account Holder's Name
- (b) Activity Date
- (c) NC-RETS Project ID for associated data posted
- (d) Activity Description identifying Data Submitted, Fractional Data Remaining, Certificates Created, etc.
- (e) Reporting Period Start
- (f) Reporting Period End
- (g) MWh of generation reported to NC-RETS during the current month
- (h) Fuel Type
- (i) Status
- (j) Note (displaying Serial Numbers or data upload file names)

## 5.9 Multi-fuel Generation Projects

For Multi-fuel Generation Projects, Certificates will be created for the eligible Fuel Type(s) only.<sup>8</sup> Each Certificate issued for a Multi-fuel Generation Project will reflect only one fuel source, with the total number of Certificates issued for a Fuel Type being proportional to the overall output for that reporting period.

After each upload of production data, the Project's Account Holder will be asked to first verify the energy production data, and then input how much of the production is attributable to each Fuel Type. The Account Holder for the facility shall retain for audit supporting documentation related to the derivation of the proportion of electric output per Fuel Type for each period for which the Generating Unit is issued Certificates. Such supporting documentation is subject to audit by state regulators (including the Commission) and the Project's QRE.

### 5.9.1 Allocating Output for Each Fuel Source

For purposes of creating Certificates reflecting the fuel source mix of Multi-fuel Generation Projects, the proportion of Certificates attributable

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<sup>8</sup> For example, a coal-fired Generating Unit that uses biomass for co-firing can be considered a Multi-fuel Generation Project and have biomass Certificates issued in respect of that biomass-fired generation.

to each Fuel Type shall be determined consistent with the following rules:

For biomass co-fired with fossil fuels or using fossil fuels for startup or supplemental firing: In each month, the Certificates for each Fuel Type in such Multi-fuel Generation Project will be created in proportion to the ratio of the net heat content of each fuel consumed to the net heat content of all fuel consumed in that month, adjusted to reflect differential heat rates for different fuels, if applicable.

### **5.10 Energy Efficiency Data Requirements**

An Electric Power Supplier that is eligible to demonstrate Portfolio Compliance via Energy Efficiency Certificates, or its Utility Compliance Aggregator, shall create a Project in NC-RETS for that purpose. The Electric Power Supplier (or its Utility Compliance Aggregator) shall use the Self-Reporting Interface to create EECs. The Electric Power Supplier or its Utility Compliance Aggregator shall retain for audit work papers demonstrating how it calculated the amount of EECs to be created. Such work papers shall detail for each customer program the estimated volume of customer participation and related energy savings, adjustments for actual operating results (participation and savings rates) and the findings of measurement and verification analyses.

## **6 Creation of Certificates**

Certificates are issued in whole numbers only. Once a Certificate is created, no changes can be made to that Certificate.

### **6.1 Certificate Creation**

The NC-RETS Administrator will issue one Certificate for each MWh of eligible electric energy or 3,412,000 Btu of eligible thermal energy that is generated or electric energy saved by a Project. Certificates are issued based on the number of whole MWh listed in the Generation Activity Log for a given reporting period. Each Certificate shall have a unique Serial Number. Certificate Serial Numbers shall contain codes embedded in the number. The table below identifies the Serial Number format used in NC-RETS.

**TABLE 2: NC-RETS SERIAL NUMBER IDENTIFIERS**

Identifier	Display Order	Data Type	Length	Range of Codes	Comments
Originating Registry	1	Alpha-numeric	3	NCRETS (WREGIS, ERCOT, GATS, MRETS, MIRECS, NEPOOL & NAR (for Certificate imports))	Used to identify originating registry (especially important for enabling import-exports with other registries)
Unit type	2	Alpha-numeric	4	REC: Renewable Energy Certificate issued for a Renewable Energy Facility or SEPA allocation EEC: Energy Efficiency Certificate issued for an energy efficiency project	Used to identify if the issuance is based on renewable energy generation, energy efficiency project
NC-RETS ID	3	Numeric	6	1 - 999999	NC-RETS Unique ID assigned to each Facility
State	4	Alpha-numeric	2		State Abbreviation identifying the State in which the renewable energy generation occurred. SEPA would be NA. EE or DSM would be NC
Vintage Month	5	Numeric	2	01-12	The month in which the renewable energy and SEPA generation occurred. Not needed for EE and DSM
Vintage Year	6	Numeric	4	2008-2099	The year in which the energy efficiency or renewable energy generation occurred.
Batch Number	7	Numeric	5	Numeric value assigned to the each batch of certificates created 1 - 99,999 unique per source per vintage.	
Serial Block Start	8	Numeric	9	Numeric values assigned by NC-RETS from 1 - 999,999,999.	A number to identify the first certificate in a block of certificates.
Serial Block End	9	Numeric	9	Numeric values assigned by NC-RETS from 1 - 999,999,999.	A number to identify the last certificate in a block of certificates.

## 6.2 Process and Timeline for Certificate Creation

Certificates will not be issued for generation occurring prior to January 1, 2008, and RECs issued in other registries before January 1, 2008, may not be imported into NC-RETS.

Once the generation data (production data as measured by a Qualifying Meter or a Qualifying Estimate) is received by the NC-RETS Administrator and a data validity check is performed, it will post in the Account Holder's "Generation Activity Log" and NC-RETS will notify the Account Holder via email that generation has been posted. The generation posting will be marked "NC-RETS Accepted" on the Generation Activity Log. Once the generation is accepted by the Account Holder, the generation posting will be marked "Account Holder Accepted." The Certificates will issue immediately following this. If the Account Holder takes no action, Certificates will issue in 14 days.

The Account Holder must notify the NC-RETS Administrator if it believes the generation data amount recorded on the Generation Activity Log is inaccurate for any reason. The Account Holder may register a dispute any time after the generation is posted and will have 14 calendar days to do so. While the generation posting dispute is being resolved, the generation posting will be marked "Account Holder Disputed." If the Account Holder does not register a dispute with the NC-RETS Administrator, the Certificates will be created in 14 days.

For Multi-fuel Generation Projects, RECs will not issue until the Account Holder both accepts the generation data and supplies supporting fuel allocation data, as specified in Section 5.9. The Account Holder must submit to NC-RETS the proportion of energy output to be allocated to each Fuel Type. The Account Holder provides the Fuel Type allocation via the Generation Data Review screen located in the Account Holder's Asset Management Module. The fuel allocation information will remain available in NC-RETS for audit purposes. Account Holders must retain for audit the work papers demonstrating how they determined the fuel allocation for each reporting period.

### **6.3 Certificate Creation for Accumulated Generation**

Generation data from Renewable Energy Facilities that have a Nameplate Capacity of 10 kW or less that self-report their output need not be reported monthly and may be accumulated over several months prior to submittal to NC-RETS for Certificate issuance. However, NC-RETS will require the owner to self-report the data in time-increments that do not exceed ~~34~~35 days. The vintage on the issued Certificate(s) will be the last month and year of generation contributing to one (1) accumulated MWh.

### **6.4 Data Fields Carried on Each Certificate**

Each Certificate carries a list of data fields. Some of these fields may not be applicable for energy efficiency projects.

**TABLE 3: CERTIFICATE DATA FIELDS**

DATA FIELD	COMMENTS
<b>CERTIFICATE DATA:</b>	
Certificate Type	REC or EEC
NC-RETS ID	Unique ID assigned to each Project record in NC-RETS.
Project Type	Used to identify if the issuance is based on a Renewable Energy Facility (including SEPA), or Energy Efficiency Project (including demand side management)
Project Name	Name of Project
Certificate Vintage	Vintage of Generation (month/year for RECs; Year for EEC, including DSM)
Certificate Serial Numbers	See details above
Quantity of Certificates	Total Certificates
Meter Data From:	Year-Month-Date
Meter Data To:	Year-Month-Date
Certificate Creation Date:	Date Certificates were issued in NC-RETS
Cost-Recovery Year:	Year of Cost-Recovery
NC REPS Expiration:	Expiration of NC REPS Eligibility
Utility behind project [EEC only]	Name of Electric Power Supplier running the EE/DSM program(s)
<b>STATIC ASSET DATA:</b>	
State or Province	State or Province facility is located in
Country	Country facility is located in
NERC Region	NERC Region facility is located in
eGrid Sub-Region	eGRID Sub-Region facility is located in
Commenced Operation Date	Date the Facility commenced operation
Fuel Type	Fuel Type abbreviation
Nameplate Capacity	Nameplate Capacity of Facility
Reporting Entity Type	QRE or Self-reporting
Reporting Entity Contact Company or Organization name	Name of QRE, if applicable
Utility to which Facility is interconnected	Utility Interconnect
Hydro Upgrade (Y/N)	Denotes whether Facility has been Upgraded
Upgrade Amount: NA	Denotes the portion, if applicable, of facility that has been upgraded and is eligible to create RECs for upgrade amt.
Re-power date (required if Re-powered Indicator = Y)	Date of re-powering
NC In-State/Out-of-State	Facilities eligible for NC and located in NC; Facilities eligible for NC and located outside of NC but with power delivered to any NC utility. If these certificates are transferred out of the utility account, they lose the NC In-State and become Out-of-State; Facilities eligible for NC and located outside of NC

ELIGIBILITY FOR VOLUNTARY PROGRAMS:	
Green-e Energy Eligible <sup>9</sup>	Denotes eligibility and, if applicable, certification number
LIHI Certified <sup>10</sup>	Denotes eligibility and, if applicable, certification number

## 7 Certificate Errors and Correction

### 7.1 Generation Data Validity Check

All generation data received by NC-RETS will undergo an automatic data validity check to ensure that erroneous and technically infeasible data is not entered into NC-RETS and used to issue Certificates. The data validity check will compare reported energy production to an engineering estimate of maximum potential production, calculated as a function of technology type, associated maximum capacity factor, Nameplate Capacity, Fuel Type and time period since the previous cumulative meter reading was entered. If data entered exceeds an estimate of technically feasible generation, the NC-RETS Administrator will be notified and the generation will be posted to the Generation Activity Log noting the status of failed feasibility. The NC-RETS Administrator will contact the Account Holder if the generation data entered is infeasible.

### 7.2 Certificate Errors Discovered After Certificate Issuance

Once a Certificate is created, no changes can be made to that Certificate. In the event that an error is discovered after Certificates have been issued, the NC-RETS Administrator will contact the Commission to explain the issue. The NC-RETS Administrator and the Commission will determine appropriate action, which could include Retiring Certificates that were created erroneously. (Certificate issuance errors caused by errors made in calculating the relative fuel mix for Multi-fuel Generation Projects will be handled in this manner.) The NC-RETS Administrator may “freeze” Certificates that are implicated in an issuance error until a method of addressing the error is developed. This means that the Certificates cannot be transferred to another Account Holder or Retired until the error is resolved. Certificate issuance errors and their resolution will be logged, and that log made available to the Public Staff and the Commission for audit.

## 8 NC-RETS Compliance Requirements

Electric Power Suppliers and Utility Compliance Aggregators will make transfers to the Compliance Sub-account to mirror and support their annual Portfolio

<sup>9</sup> This field is targeted for users who will use NC-RETS for voluntary program certifications.

<sup>10</sup> This field is targeted for users who will use NC-RETS for voluntary program certifications.

Standard compliance filing to the Commission. Certificates in this Sub-account will remain in Active status until the Compliance Sub-account has been reviewed and approved by the Commission. Once approved, the Certificates will be Retired. The Public Staff and the Commission will have access to the Sub-account details.

The process will work as follows:

1) Electric Power Suppliers will establish a Compliance Sub-account for a compliance year using the "Create New Sub-Account" link. Reference Section 2.6 for more details about how Compliance Sub-accounts function. The Electric Power Supplier or Utility Compliance Aggregator will select the relevant compliance year and compliance type (electric public utility or municipality/electric membership corporation) to determine the mandates they have to meet via the given Compliance Sub-account. Utility Compliance Aggregators will need to specify the specific Electric Power Suppliers for which they are reporting, along with the prior year retail sales for each of those Electric Power Suppliers. Utility Compliance Aggregators have the option to create a Compliance Sub-account for each municipality or electric membership corporation separately if they so choose. Or, several Electric Power Suppliers (municipality/electric membership corporations only) can be grouped together for purposes of a Compliance Sub-account.

2) Electric Power Suppliers or Utility Compliance Aggregators can then proceed to transfer Certificates to the Compliance Sub-account(s).

3) From a Compliance Sub-account the Account Holder can access a Compliance Report that displays the quantity achieved and quantity still needed for specific mandates such as solar power, swine waste, and poultry waste, as well as the overall Portfolio Standard mandate, using the mandate requirement reflected in the statute for electric public utilities or municipal utilities/electric membership corporations. The report will also display the proportion of the Certificates that are in-state (including out-of-state RECs bundled with power delivered to NC) and how many are unbundled out-of-state Certificates.

4) When the Account Holder has finished their transfers for the compliance year, they will 'submit' the Compliance Sub-account for Commission review. This will lock the Certificates in place allowing for the Public Staff and Commission to perform their reviews. No changes to this Sub-account can be made by the Account Holder during this time.

5) The Commission will receive an automatic notification that a report has been submitted for their review. After their review the Commission can select to either 'approve' or 'reject' the Compliance Sub-account. Approval will result in the Certificates being Retired permanently in the Compliance Sub-account associated with the given compliance year. Rejection will reopen the Compliance

Sub-account to allow the Account Holder to amend the Compliance Sub-account with the required Certificates after which they can re-submit the Sub-account for Commission review. Status of the Compliance Sub-account can be accessed via the Compliance Reports available to the Account Holder, the Public Staff and the Commission.

## 9 Public Reports

Public reports will be accessible to anybody via the public page on the NC-RETS website. It is expected that additional public reports will be added to meet future needs of Account Holders and Program Administrators using NC-RETS. Public reports are carefully designed to ensure the confidentiality of Account Holder data per the Terms of Use. See the Terms of Use for more information regarding confidentiality.

- **Account Holders.** This report contains a listing of all Account Holders with some limited contact information.
- **NC-RETS Projects.** This report contains a list of current and historic facilities by fuel source with owner information, updated daily as needed. It includes a link to each Project's docket within the Commission's website.
- **RECs Issued- Annual Report.** This report will have a drop-down list beginning with 2008. Data for 2010 RECs Issued will not be posted until April 1<sup>st</sup> 2011. The same will be true with all following years where the data for the previous year is not posted until April 1st. Data to be shown will be an aggregate of RECs issued by fuel type and eligibility.
- **EECs Issued- Annual Report.** This report will have a drop-down list beginning with 2008. Data for 2010 EECs Issued will not be posted until April 1<sup>st</sup> 2011. The same will be true with all following years where the data for the previous year is not posted until April 1st. Data to be shown will be an aggregate of EECs issued per utility that performed the energy savings.
- **Public Utility Compliance Report.** Provides details of each utility's Portfolio Standard compliance filed per year.
- **Imported Facilities Report.** Shows all Renewable Energy Facilities which exported Certificates into NC-RETS.
- **Bulletin Board.** Shows RECs which are posted by Account Holders as being available for purchase.

## 9.1 Account Holder Reports

Account Holder reports for a specific Account will only be accessible to the Account Holder, their designated agents and the NC-RETS Administrator. Account Holders, including all of the Users for an Account, can view up-to-date data in these reports at any time. Current reports include:

- **My Event Log.** This report lists all of the events that have taken place in the Account.
- **My Sub-Accounts.** This provides a list of Certificates held in the Account's Sub-accounts and allows the Account Holder to filter data by specific Active or Retirement Sub-accounts.
- **My Certificate Transfers.** This report provides a comprehensive list of Certificate transfers between Sub-accounts and other Account Holders in NC-RETS.
- **My Recurring Transfers.** This includes transfer details related to Forward Transfers only.
- **My Account Holder Registration History.** This report provides a list of all the changes to the Account Holder registration data.
- **My Project Registration History.** This report provides a list of all the Projects that have been registered in NC-RETS and includes the date of registration, the NC-RETS ID and a link to the Project registration screens.
- **My Generation Activity Log.** This report provides a log of all generation and energy efficiency data loaded into NC-RETS for all of an Account Holder's Projects. It includes both self-reported data and each file uploaded by a QRE.
- **My Generation Report.** This report shows a summary of the data loaded by vintage for each facility.
- **My Compliance Report.** This report provides North Carolina Electric Power Suppliers and Utility Compliance Aggregators the ability to view their Certificates transferred into their Compliance Sub-accounts with built-in calculations to determine if the compliance obligations are being met or not.
- **Non-NC REPS Retirement Report.** This report captures all voluntary retirement for any Account Holder retiring RECs for reasons other than the Portfolio Standard requirement.

- **Cost Recovery Report.** The Cost Recovery Report is only available to NC Electric Power Supplier Accounts. This report lists all Certificates held in the Account with a checkbox for the Account Holder to select all batches of Certificates to be reported for a cost recovery year.
- **My Invoices.** This report lists all NC-RETS invoices that have been issued to the Account Holder including the amount and payment status. The report also includes payment information.

## 10 Data Security

The following are a minimum set of security practice requirements for NC-RETS to ensure data integrity and confidentiality:

- (a) Secured web portal interface with password protection for Static Data collection, User access and reporting.
- (b) Restricted access privileges based on participant and User roles using digital certificates.
- (c) Well-defined system backup and recovery processes.
- (d) Secured file transfer and data upload processes using encrypted communications for all data interfaces.

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## Appendix A: Account Holder Registration Process

The following information will guide you through the steps necessary to create an NC-RETS Account. The NC-RETS Administrator is available to assist you throughout the registration process. Please call (888-378-4461) or email [NCRETS@apxenv.com](mailto:NCRETS@apxenv.com).

### STEP 1 – REVIEW NC-RETS OPERATING DOCUMENTS

You should first review the NC-RETS Operating Documents including the Terms of Use, Fee Schedule and Operating Procedures. The documents are on the Documents page (under the Resources tab) on the NC-RETS website ([www.ncrets.org](http://www.ncrets.org)).

### STEP 2 – ONLINE REGISTRATION

Go to [www.ncrets.org](http://www.ncrets.org) and select the “Register for an Account” link. A pop-up window will appear with a checklist describing the steps required to register for an Account. Select the appropriate Account Type and click the “Continue Registration” button.

The available Account Types are:

- North Carolina Electric Power Supplier<sup>11</sup>
- General Account
- Qualified Reporting Entity
- Program Auditor

### STEP 3 – ACCEPT THE TERMS OF USE

Read and agree to the NC-RETS Terms of Use (this is your next step after clicking “Continue Registration”). Acceptance of the Terms of Use must be indicated by reviewing all terms; checking each section; and lastly, agreeing to the Terms of Use by pressing the “I Agree” button.

### STEP 4 – COMPLETE ACCOUNT APPLICATION

Upon accepting the Terms of Use, the next screen shows the online New Account Application Form. You will need to complete all required fields that are noted by an asterisk (\*). You must designate at least one person, but may designate two, who would receive emails regarding the status of NC-RETS invoices and payments. Note: It will be possible for the public to view the Organization Contact information you provide when your Account is approved by the NC-RETS Administrator.

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<sup>11</sup> See Page 3 for instructions regarding inputting prior year sales data.

Upon completing the New Account Application Form and clicking “Submit,” you will receive an email notification to validate/activate your registration. This activation must occur before the NC-RETS Administrator is notified of your pending Account.

#### STEP 5 – ACCOUNT REVIEW

The NC-RETS Administrator will review the Account application. If the Account application is complete and approved, an email notification of Account approval will be sent to the designated Account Manager email address provided in the New Account Application Form. If materials are incomplete or additional information is required, the NC-RETS Administrator will notify the Account Manager. Approved Account Holders may begin using all functions of NC-RETS available to their type of Account.

#### STEP 6 – CREATE SUB-ACCOUNT(S) & ADDITIONAL LOGINS

Upon Account approval, default Sub-accounts are automatically created based on the privileges of your Account type. All NC Electric Service Provider Accounts, and General Accounts will receive one Active, Export and Retirement Sub-account. Additional Sub-accounts can be created and Logins added to an Account.

## Appendix B: Project Registration Process

The following information will guide you through the steps necessary to register a Project in your NC-RETS General or North Carolina Electric Power Supplier Account. The NC-RETS Administrator is available to assist you throughout the registration process. Please call 888-378-4461 or email [NCRETS@apxenv.com](mailto:NCRETS@apxenv.com).

### STEP 1 – Review NC-RETS Operating Procedures

The NC-RETS operative documents detail the requirements and definitions of different types of Projects. The documents are available on:

[www.ncrets.org/resources/documents](http://www.ncrets.org/resources/documents).

### STEP 2 - Register Project

- a. Log in to your Account and from the Manage Projects module, select the "Register New Project" link.
- b. Fill out the information on the New Project Registration page and select "Next."
- c. Continue to fill out the information on the second and third page of the New Project Registration screen and press "Submit."
- d. The NC-RETS Administrator will then be notified of the New Project Registration.
- e. At any time during this process you can save the form and return to complete it at a later time if you do not have all the required information.

Note: Owners of thermal projects will be required to enter their facility's maximum capacity in MW or annual energy production in MWh. To ease the process of registering a new thermal project, owners might want to calculate these conversions prior to starting the registration process.

### STEP 3 - Project Review

The NC-RETS Administrator will review the New Project Registration. For an energy project, the NC-RETS Administrator will compare the registration information to the Commission's order approving the Project as a Renewable Energy Facility. For an energy efficiency project, the NC-RETS Administrator will contact Commission Staff to verify that the electric power supplier is creating a project that is consistent with its REPS compliance plan filed with the Commission. Discrepancies regarding ownership and Project fuel(s) and size will need to be resolved before the Administrator will approve the Registration. If the New Project Registration is complete and approved, an email notification describing account approval is sent to the Account Holder. If materials are

incomplete or additional information is required, the Administrator will notify the Account Manager.

#### STEP 4 – Certificate Issuance

Certificates can be issued whenever metering data is available and has been communicated to NC-RETS. Metering data must come from a QRE (unless the Project is a Self-Reporting Facility). The Account Holder will receive an email indicating that metering data is available for their review. The Account Holder has 14 days in which to dispute the metering data. If the Account Holder takes no action, Certificates will issue in 14 days. In addition, the Account Holder can immediately approve the data, and Certificates will issue within one day.

All energy efficiency projects (including demand side management for municipalities and electric membership corporations) are self-reporting and can submit the energy savings data once per year to issue Energy Efficiency Certificates. Such Electric Power Suppliers must retain for audit their work papers demonstrating their forecasted energy savings for each program that they operate, and the actual results of those programs, including data from measurement and verification reports filed with the Commission. A group of energy efficiency programs may be treated by an Electric Power Supplier or Utility Compliance Aggregator as one Project within NC-RETS, provided that the Electric Power Supplier or Utility Compliance Aggregator maintains thorough documentation explaining how the net savings (and resulting Energy Efficiency Certificates) were calculated.

Unless otherwise provided, each municipal utility or electric membership corporation (or their Utility Compliance Aggregator) that wants NC-RETS to issue Certificates for their Southeastern Power Administration (SEPA) allocations will need to create a Project in NC-RETS and self-report their monthly SEPA deliveries based on their invoice from SEPA.

#### STEP 5 – Annual Update of Renewable Energy Facility Registration

Per the Commission's rules, Renewable Energy Facilities must annually provide attestations in order to continue to earn Certificates eligible for compliance with the Portfolio Standard. Each March 1<sup>st</sup>, March 20<sup>th</sup>, April 1<sup>st</sup> and April 15<sup>th</sup> NC-RETS will send an automated notification reminder to Account Holders that have Projects assigned to them. These notifications will remind the Account Holder of the need to complete the on-line attestation form. The Account Holder will be asked to certify that the Renewable Energy Facility remains in substantial compliance with laws for protecting the environment, that the facility continues to be operated as a Renewable Energy Facility, that Certificates from the facility are not being remarketed and that the Account Holder agrees to the auditing of its books by the Public Staff and the Commission. The facility owner certifies on-line regarding these four statements and provides their name, title, company and

phone number. After April 1, the Account Holder will be forced to complete the attestation in order to continue using NC-RETS. If the Account Holder has not completed the attestation by April 15, NC-RETS will notify the Commission which will consider whether to revoke the Renewable Energy Facility's registration.

## **Appendix C: Documentation Requirements for Multi-fuel Generation Projects**

Upon registering a Multi-fuel Generation Project, the Account Holder must submit to the NC-RETS Administrator a report documenting the methodology it will use to calculate the energy production associated with each fuel used during a month. Following the NC-RETS Administrator's review and acceptance of such a report's methodology, the Account Holder may seek creation of Certificates.

Documentation of the following information used to calculate the proportion of energy output per Fuel Type generated by the Renewable Energy Facility during a billing period must be maintained by Multi-fuel Renewable Energy Facilities for 10 years or as otherwise required by Commission rule.

1. Quantities of each Fuel Type used must be documented and must be consistent with those reported to Balancing Authority(s), EPA or state air regulators, if applicable.
2. Documentation of net heat content for each Fuel Type (if applicable) must be supported by documentation.
3. Specification of a heat rate must be consistent with the heat rate reported to the Renewable Energy Facility's Balancing Authority, if applicable.

## Appendix D: NC-RETS Generator Fuel Types

<b>FUEL/PROJECT TYPE (SHORT DESCRIPTION)</b>	<b>FUEL/PROJECT TYPE(LONG DESCRIPTION)</b>	<b>RENEWABLE</b>
BAW	Biomass - Agricultural Solid Waste	Yes
BA3	Biomass - Animal Waste - Other Animal Waste, Solid or Gas	Yes
BA2	Biomass - Animal Waste - Poultry Waste, Solid or Gas	Yes
BA1	Biomass - Animal Waste - Swine Waste, Solid or Gas	Yes
BML	Biomass - Combustible Liquids - Other	Yes
BBL	Biomass - Combustible Liquids - Spent Pulping Liquors	Yes
BMC	Biomass - Energy Crop	Yes
BLF	Biomass - Landfill Methane	Yes
BMO	Biomass - Other Biomass, including Combustible Residues	Yes
BIM	Biomass - Other Combustible Gas	Yes
BWW	Biomass - Wood Waste	Yes
CO1	Coal	No
DI1	Diesel	No
GE1	Geothermal	Yes
HYD	Hydropower - Non-SEPA	Yes
H2O	Hydropower - SEPA	Yes
JET	Jet Fuel	No
MSW	Municipal Solid Waste - Non-Renewable	No
NG1	Natural Gas	No
OC1	Ocean/Wave/Current	Yes
OIL	Oil	No
OTH	Other non-renewable fuel	No
SO1	Solar - Photovoltaic	Yes
STH	Solar - Thermal	Yes
<u>STU</u>	<u>Solar – Thermal Unmetered</u>	<u>Yes</u>
<u>TDF</u>	<u>Tire Derived Fuel – Renewable</u>	<u>Yes</u>
<u>TIR</u>	<u>Tire Derived Fuel – Not Renewable</u>	<u>No</u>
WND	Wind	Yes

## **Appendix E: List of Referenced Documents**

NC-RETS Terms of Use  
NC-RETS Fee Schedule  
North Carolina Session Laws 2007-397  
Commission Rules R8-64 through 69

## Appendix F: Compatible Tracking Systems

<b>COMPATIBLE TRACKING SYSTEM</b>	<b>CAN EXPORT CERTIFICATES TO NC-RETS</b>	<b>CAN IMPORT CERTIFICATES FROM NC-RETS</b>	<b>WEBSITE</b>
North American Renewables Registry (NAR)	Yes	Yes	<a href="http://narenewables.apx.com">narenewables.apx.com</a>
<u>Midwest Renewable Energy Tracking System (M-RETS)</u>	<u>Yes</u>	<u>No</u>	<a href="http://mrets.org">mrets.org</a>
<u>Western Renewable Energy Generation Information System (WREGIS)</u>	<u>Yes</u>	<u>No</u>	<a href="http://wregis.org">wregis.org</a>
<u>Electric Reliability Council of Texas (ERCOT)</u>	<u>Yes. See Appendix G</u>	<u>No</u>	<a href="http://texasrenewables.com">texasrenewables.com</a>
<u>PJM GATS</u>	<u>No</u>	<u>No</u>	<a href="http://Pjm-eis.com">Pjm-eis.com</a>

## APPENDIX G: PROTOCOL FOR IMPORTS FROM ERCOT

Step	Process	ERCOT Status	NC RETS
1	Seller will transfer RECs from their ERCOT account to <u>APX, Inc (for benefit of NC-RETS) account.</u>	<u>Pending transfer</u>	<u>n/a</u>
2	Seller will email NC-RETS admin the “Export Request Form” which includes the details below as well as agreement to release data to NC-RETS: 1) <u>REC Quantity to be transferred</u> 2) <u>REC serial numbers</u> 3) <u>REC Vintage</u> 4) <u>Seller account name &amp; ID# in ERCOT</u> 5) <u>Buyer account name &amp; ID# in NC-RETS account ID</u>	<u>Pending transfer</u>	<u>n/a</u>
3	1) <u>APX will confirm that the details in the Export Request Form match the RECs that are pending transfer in the APX, Inc (for benefit of NC-RETS) account.</u> 2) <u>APX will confirm that the facility is approved by the NCUC.</u> 3) <u>APX will respond to the Seller in ERCOT that it is awaiting confirmation from the Buyer in NC-RETS or make the Seller in ERCOT aware of any issues found in 1-2 above.</u>	<u>Pending transfer</u>	<u>n/a</u>
4	<u>APX will email the Export Request Form from the Seller in ERCOT to the Buyer in NC-RETS to confirm transaction details</u>	<u>Pending transfer</u>	<u>n/a</u>
5	<u>Upon confirmation from the Buyer in NC-RETS, ERCOT REC transfer will be accepted in APX, Inc (for benefit of NC -RETS) account. and proceed to step 6</u> -or- <u>Upon rejection by the buyer in NC-RETS, ERCOT REC transfer will be rejected by the APX, Inc (for benefit of NC-RETS) account. (No further steps needed)</u>	<u>Transfer Accepted – Certificates Active in APX-ERCOT account</u> <u>OR Transfer Rejected – Certificates Active in Seller’s account in ERCOT</u>	<u>n/a</u>
6	<u>NC-RETS Admin creates Project Record in NC-RETS, if necessary<sup>12</sup>, and issues RECs in NC-RETS.</u>	<u>Certificates Active in the ERCOT APX, Inc. Account</u>	<u>Certificates Issued in APX’s NC-RETS account</u>
7	<u>NC-RETS Admin transfers RECs to the buyer in NC-RETS</u>	<u>Certificates Active</u>	<u>Certificates Pending transfer</u>
8	<u>Buyer in NC-RETS accepts transfer.</u>	<u>Certificates Active</u>	<u>Transfer Accepted</u>

<sup>12</sup> If this is the first import of RECS from the facility, an import project will need to be created in NC-RETS. The projects are created once in the NC-RETS administrator account and stay there. After being created once, they do not need to be created for each future transaction.

9	APX retires Certificates in ERCOT, <i>APX, Inc (for benefit of NC-RETS)</i> account with the following details: Export to NC RETS [Exporter] [Importer][Date]	<u>Certificates Retired</u>	<u>Certificates Active in Buyer's NC-RETS account</u>
10	APX confirms conclusion of import with both parties (REC Exporter and REC Importer). APX creates log entry in NC-RETS with REC details for the ERCOT RECs that were retired, paired with the NC-RETS RECs that were created.	<u>Certificates Retired</u>	<u>Certificates Active</u>



# **NORTH CAROLINA RENEWABLE ENERGY TRACKING SYSTEM OPERATING PROCEDURES**

**January 31, 2011**

**Disclaimer:** This document is intended to guide the operations of NC-RETS, both the users of the system and its administrator, APX. It is intended to be consistent with the NC Utilities Commission's rules implementing North Carolina's Renewable Energy and Energy Efficiency Portfolio Standard. Please contact Commission Staff if you believe there is a conflict between these Operating Procedures and the Commission's rules. NC-RETS users can propose changes to these procedures by participating in the NC-RETS Stakeholders Group.

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## Glossary

**Account:** An Account is the vehicle by which an individual or an organization participates in NC-RETS and uses the system to upload Renewable Energy Facility production data, or to create, hold, track and/or retire RECs in Sub-accounts, or to audit an Electric Power Supplier's compliance with North Carolina's Portfolio Standard. There are four Account types in NC-RETS: NC Electric Power Supplier, General, Qualified Reporting Entity, and Program Auditor.

**Account ID:** A unique NC-RETS identifier for an Account that is assigned by NC-RETS when the NC-RETS Administrator approves the Account in NC-RETS.

**Account Holder:** An Account Holder is a person or organization that has registered with NC-RETS and has established an Account in order to own RECs in NC-RETS, provide Renewable Energy Facility production data to NC-RETS, or audit a compliance program within NC-RETS.

**Account Manager:** An Account Manager is the administrator for an Account Holder's NC-RETS Account, having the ability to, among other things, setup and manage additional logins and login privileges for other Users, typically other employees of the same organization.

**Active Certificates:** An Active Certificate is a Renewable Energy Certificate or Energy Efficiency Certificate that is held in an Active Sub-account and that has not yet been retired. Such Certificates may be traded, transferred, exported or retired at the discretion of the Account Holder of the Active Sub-account, except that Energy Efficiency Certificates can be used for compliance with North Carolina's Portfolio Standard only by the Electric Power Supplier that produced them or by a group of affiliated Electric Power Suppliers using the same Utility Compliance Aggregator.

**Active Sub-account:** An Active Sub-account is a Sub-account of an Account Holder's Account and is the holding place for all Active Certificates. If the Account Holder is the owner of a Renewable Energy Facility, or is the Responsible Party of a Renewable Energy Facility, their Active Sub-account will be the first point of deposit for any Certificates created that are associated with the Project ID number, unless the Certificate is subject to a Forward Certificate Transfer. Similarly, if the Account Holder is an Electric Power Supplier that operates an energy efficiency program, the related Certificates are created in an Active Sub-account. An Active Sub-account may be associated with one or more Projects.

**Balancing Authority:** The entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority area,

and supports interconnection frequency in real time. Duke Energy and Progress Energy are the Balancing Authorities for most of North Carolina. PJM is the Balancing Authority for Dominion North Carolina Power's service area.

**Bulletin Board Sub-account:** The Bulletin Board Sub-account is an Active Sub-account of an Account Holder's Account and is the holding place for Active Certificates that the Account Holder has posted for sale on the Bulletin Board.

**Certificate:** NC-RETS issues two kinds of Certificates: Renewable Energy Certificates (RECs), and Energy Efficiency Certificates (EECs). Unless otherwise specified by statute, rule or NCUC order, NC-RETS will issue one Certificate for each MWh of energy produced by a Renewable Energy Facility or saved via an Electric Power Supplier-sponsored energy efficiency or demand-side management program. Certificates from Renewable Energy Facilities that are Multi-fuel Facilities shall be issued pursuant to Section 4.2.

**Commission:** The Commission is the North Carolina Utilities Commission.

**Compliance Sub-account:** A Sub-account used by an Electric Power Supplier or Utility Compliance Aggregator to demonstrate compliance with a specific year of Portfolio Standard obligation(s). The Account Holder places Certificates into the Compliance Sub-account, which is then audited by the Public Staff. Once the Commission has approved the Account Holder's compliance with the Portfolio Standard, the RECs are retired.

**Creation Date:** The date (DD/MM/YYYY) that a Certificate is created. Certificates are created upon acceptance of production data by the Account Holder, or if the production data passes all system validations, the Certificates will automatically create fourteen (14) days after the production data was uploaded into NC-RETS.

**Customer-Sited Distributed Generation:** A Renewable Energy Facility that is interconnected behind a retail customer meter and therefore not directly interconnected with either the distribution system or transmission system (including net metered facilities).

**Directory of Account Holders:** The Directory of Account Holders is a listing of all Account Holders registered with NC-RETS. This directory includes limited information for contacting each Account Holder and is available to the public via the NC-RETS website.

**Directory of Renewable Energy Facilities and Energy Efficiency Projects:** This is a listing of all approved Projects within NC-RETS.

**Dynamic Data:** Dynamic Data is variable information that is associated with a specific MWh produced or saved by a Project, such as Certificate Serial Number or Creation Date.

**Electric Power Supplier:** An organization that sells electricity to retail end users, such as investor-owned utilities, municipal utilities, and electric membership corporations. All Electric Power Suppliers in North Carolina must comply with the State's Portfolio Standard, although the requirements vary slightly for investor-owned utilities versus municipal utilities and electric membership corporations.

**Forward Transfer:** A transfer of Certificates arranged in advance to be effectuated on a specific future date.

**Fuel Type:** The kind of fuel or source of energy used to produce electric or thermal energy at a Renewable Energy Facility. See Appendix D for a list of eligible Fuel Types. This list was established by the North Carolina General Assembly when it enacted NC's Portfolio Standard.

**General Account:** This type of Account can hold, transfer (outgoing and incoming), and Retire Certificates for voluntary (non-compliance) reasons. This kind of Account can also open a Sub-account where RECs are created for a Renewable Energy Facility.

**Generation Activity Log:** The Generation Activity Log is an electronic ledger where energy production from Renewable Energy Facilities and energy saved by Electric Power Supplier energy efficiency programs is posted prior to Certificate creation. Each time production or savings data is received by NC-RETS for a particular Project, the date and quantity of qualifying MWhs produced or saved is posted to the Generation Activity Log. Adjustments received are posted likewise.

**Inbox:** Certificate transfers to an Account Holder are first posted in the Account Holder's Inbox. The Account Holder then either accepts or rejects the transfer. Upon acceptance, the Certificates are deposited in the Sub-account designated by the Account Holder.

**Megawatt-hour (MWh):** One thousand kilowatt-hours or 1 million watt-hours of energy. One MWh of energy produced by a qualifying fuel at a Renewable Energy Facility is required to create one Renewable Energy Certificate. One MWh of energy saved by an Electric Power Supplier's energy efficiency or demand side management project is required to create one Energy Efficiency Certificate.

**Multi-fuel Facility or Generation Project:** A Renewable Energy Facility that produces energy using more than one Fuel Type and might partially rely on a fuel that does not qualify for issuance of Certificates. See Section 4.2 below.

**Nameplate Capacity:** The maximum rated output of a generator, prime mover or other electric power production equipment under specific conditions designated by the manufacturer. Size classification in Megawatts (MW) is based on Nameplate Capacity.

**NC-RETS Administrator:** The NC-RETS Administrator is the entity under contract with the Commission to implement the NC-RETS Operating Procedures. The Commission selected APX to be the NC-RETS Administrator. The NC-RETS Administrator confers with Commission Staff, which seeks Commission concurrence, for exceptions to the NC-RETS Operating Procedures.

**North Carolina Electric Power Supplier Account:** This type of Account can hold, transfer (outgoing and incoming), and Retire Certificates. A North Carolina Electric Power Supplier Account can also register and maintain Projects and have Certificates issued to it for its Projects. A North Carolina Electric Power Supplier Account is the only kind of Account that can retire Certificates for compliance with NC's Portfolio Standard.

**Outbox:** After initiating a Certificate transfer, an Account Holder will see the Certificates in its Outbox. The Account Holder to whom the Certificates have been transferred will either accept or reject the transfer. If rejected, the Certificates will be returned to the Active Sub-account from which they were transferred. If accepted, the Certificates are transferred to the receiving Account Holder.

**Portfolio Standard:** The law enacted by North Carolina's General Assembly via Session Law 2007-397 that requires all Electric Power Suppliers serving retail customers in North Carolina to meet an increasing portion of their customers' electricity needs from renewable energy and conservation.

**Prior Period Adjustment:** An addition or subtraction made to a current Certificate issuance in order to correct for an under- or over-issuance of Certificates made in error in a prior period, most commonly due to inaccurate metering data.

**Program Auditor Account:** North Carolina regulators will use this Account to review Compliance Sub-accounts submitted by North Carolina Electric Power Suppliers and Utility Compliance Aggregators, as well as to view NC-RETS reports.

**Project:** A Project is either a Renewable Energy Facility or an Electric Power Supplier's qualifying energy efficiency programs (including demand-side management for municipalities and electric membership corporations).

**Project ID:** A unique NC-RETS identifier for a Project that is assigned by NC-RETS when the NC-RETS Administrator approves a Project for Certificate issuance in NC-RETS.

**Project Name:** Project Name is the name assigned to a Project when it is registered in NC-RETS.

**Public Staff:** The State agency charged with investigating Electric Power Supplier compliance with North Carolina's Portfolio Standard (among other things) and representing the using and consuming public in proceedings before the Commission.

**Qualified Reporting Entity (QRE) Account:** This Account type should be used for an NC-RETS Account Holder that reports meter readings and other generation data to the NC-RETS Administrator. Qualified Reporting Entities include Balancing Authorities, Electric Power Suppliers, a federal power agency or a municipal power agency. A QRE Account is assigned to each Project (except for those that are allowed to provide Qualified Estimates and Self-Reporting Facilities) and it is responsible for providing the Project's energy production information. NC-RETS tracks the specific Projects for which a QRE provides production information. A QRE Account cannot hold Certificates.

**Qualifying Estimates:** These are electric production estimates, based on generally accepted analytical tools such as PV Watts ([www.pvwatts.com](http://www.pvwatts.com)) for inverter-based solar photovoltaic Renewable Energy Facilities with a Nameplate Capacity of 10 kW or less. The facility owner shall document such estimates and retain such documentation for audit by the Commission and the Public Staff. Qualifying Estimates may be used to issue RECs in NC-RETS.

**Qualifying Meter:** This is a meter that provides energy production data of sufficient quality that it can be relied upon for the issuance of Certificates. For a Renewable Energy Facility that is interconnected to a Balancing Authority, it is the meter or data source that is used by the Balancing Authority for settlements. For Renewable Energy Facilities that are interconnected to an Electric Power Supplier's distribution system, it is the meter supplied by and read by the Electric Power Supplier. For a Renewable Energy Facility that is interconnected behind an Electric Power Supplier's meter at a customer's location, a Qualifying Meter can either be 1) an ANSI-certified meter that may be read and self-reported by the owner of the Renewable Energy Facility who shall comply with the Commission's meter testing requirements pursuant to Commission Rule R8-13; or 2) another industry-accepted, auditable and accurate metering, controls and verification system. For a combined heat and power system or solar thermal energy facility that has been approved by the Commission as a Renewable Energy Facility, the facility's useful thermal energy (excluding energy used to produce electricity) may be measured by an industry-accepted meter for

measuring British thermal units (Btu). NC-RETS shall issue one Certificate for every 3,412,000 Btu of qualifying thermal energy.

**Qualifying MWh:** Energy that is produced by a Renewable Energy Facility via a fuel source or technology that qualifies it for the NC Portfolio Standard.

**Renewable Energy Certificate (REC):** See Certificates.

**Renewable Energy Facility:** An energy production facility that has been approved by the Commission as eligible to have some or all of its output count toward NC's Portfolio Standard. The owner of such a Facility located in North Carolina is eligible to register that Facility in NC-RETS, where Certificates are issued for qualifying energy production.<sup>1</sup>

**Responsible Party:** An Account Holder who has been assigned the registration rights for a given Project. This assignment occurs outside of NC-RETS and gives the designated Account Holder *full and sole* management authority over the transactions and activities related to the Project within NC-RETS.

**Retirement Sub-account:** A Retirement Sub-account is used as a repository for Certificates that the Account Holder wants to designate as Retired and remove from circulation. Once a Certificate has been transferred into a Retirement Sub-account, it cannot be transferred again to any other Sub-Account.

**Retirement of Certificates or Retirement/Retire:** Retirement of Certificates is an action taken within NC-RETS to permanently remove a Certificate from circulation. There are two types of retirement: voluntary or compliance. Retirement may be initiated only by the Account Holder for Certificates in his/her own Sub-accounts. Voluntary retirement is effectuated by transferring Certificates into a Retirement Sub-account. For Electric Power Suppliers, compliance retirement occurs when RECs are placed into a Compliance Sub-account, and submitted for review to the Commission. RECs associated with an approved Compliance Sub-account are placed into retirement by Commission action.

**Self-Reporting Facility:** This is a Renewable Energy Facility or utility-sponsored energy efficiency or demand-side management Project for which the owner self-reports its output or energy savings. This includes 1) a customer-sited Renewable Energy Facility interconnected behind an Electric Power Supplier's meter that has either 1) a meter that meets ANSI standards and complies with Commission Rule R8-13, or 2) another industry-accepted, auditable and accurate metering, controls and verification system; 2) inverter-based solar facilities of 10-kW or less; 3) solar thermal facilities; and 4) combined heat and power

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<sup>1</sup> The owner of a Renewable Energy Facility that is located in South Carolina, which has its meter read by a NC Electric Power Supplier, may also register the Project in NC-RETS for the issuance of RECs.

facilities. Self-Reporting Facilities transmit their production data to the NC-RETS Administrator via the Self-Reporting Interface pursuant to Section 5.7.

**Self-Reporting Interface:** This is a standard internet-based data entry portal that serves as the method for a Self-Reporting Facility, including energy efficiency and demand-side management Projects, to communicate dynamic data to the NC-RETS Administrator pursuant to Section 5.7.

**Serial Number:** NC-RETS assigns a Serial Number to each Certificate that it issues. The Serial Number contains embedded codes that explain when it was issued.

**Static Data:** Static Data describes the attributes of a Project and includes information related to the characteristics of the Renewable Energy Facility such as technology type, ownership and location.

**Station Service:** Station Service is the portion of electricity or thermal energy produced by a Renewable Energy Facility that is immediately consumed at that same facility in order to power the facility's pumps, etc., or to process fuel. Such energy is not eligible for issuance of Certificates.

**User:** Any person who has been granted access by an Account Holder to "use" its Account in NC-RETS, which may include viewing information, performing transactions and changing personal information. The Account Holder may at any time revoke the permissions granted to a User by notifying the NC-RETS Administrator. NC-RETS tracks the specific activities of each User through their unique login and password.

**Utility Compliance Aggregator:** An organization that assists an Electric Power Supplier or group of Electric Power Suppliers in demonstrating its compliance with NC's Portfolio Standard.

## 1. Introduction

The Commission established the North Carolina Renewable Energy Tracking System (NC-RETS) to issue and track Renewable Energy Certificates (RECs) and Energy Efficiency Certificates (EECs). NC's electric utilities use NC-RETS to demonstrate compliance with the State's Portfolio Standard established under Session Law 2007-397. Renewable energy producers may register their facilities with the Commission. If approved, they can use NC-RETS to create RECs that meet the requirements of NC's Portfolio Standard.

NC-RETS uses verifiable energy production data from participating facilities to create one digital Certificate for each MWh (or thermal equivalent) generated from renewable energy. Electric Power Suppliers and Utility Compliance Aggregators use NC-RETS to track the results of qualifying energy efficiency and demand-side management customer programs operated by Electric Power Suppliers. NC-RETS and all related energy production and customer program records are audited by the Public Staff of the North Carolina Utilities Commission. NC-RETS will integrate with all other REC tracking systems in the United States to allow for the import and export of RECs to and from North Carolina.

## 2. NC-RETS User Registration

### 2.1 Participation in NC-RETS

Any party is eligible to participate in NC-RETS, which means that any person can own RECs and track them in NC-RETS. NC-RETS includes many reports and links that are available to the general public. The Public Staff and the Commission use NC-RETS to audit compliance with NC's Portfolio Standard.

Electric Power Suppliers (or their Utility Compliance Aggregators) must use NC-RETS to demonstrate their compliance with NC's Portfolio Standard. An Electric Power Supplier establishes an Account in NC-RETS to hold RECs, including those that they acquire or generate and those associated with allocations from the Southeastern Power Administration (SEPA). Similarly, an Electric Power Supplier uses NC-RETS to document and track eligible energy savings via Energy Efficiency Certificates (EECs) from its qualifying energy efficiency and demand-side management programs. Each year, starting in 2011 for the 2010 compliance year, Electric Power Suppliers and Utility Compliance Aggregators will move RECs and EECs into a Compliance Sub-account, which will be audited to determine whether the organization

complied with the Portfolio Standard.<sup>2</sup> Once the Commission determines that the organization has complied, those RECs will be permanently Retired, meaning they cannot be sold or reused for compliance.

NC-RETS issues and tracks Certificates originating from NC's Projects registered in NC-RETS and also tracks those Certificates that are imported into NC-RETS from other tracking systems in the United States. Organizations that operate Renewable Energy Facilities located in North Carolina and that want RECs associated with their facilities' output to be eligible to count toward NC's Portfolio Standard must participate in NC-RETS.<sup>3</sup> They use NC-RETS to create an Account for each facility where production data (meter readings or self-reported data, depending on the facility's size) or other criteria are uploaded, and RECs are issued. After arranging to sell RECs to a North Carolina Electric Power Supplier or Utility Compliance Aggregator, they will be able to use NC-RETS to transfer those RECs to the purchaser. In addition, NC-RETS has a Bulletin Board where they can post RECs that they would like to sell.

Utility organizations that read the production meters for any Renewable Energy Facilities located in North Carolina use NC-RETS to provide those meter readings on an on-going basis. NC-RETS uses those meter readings to create one REC for each qualifying MWh of energy produced by a Renewable Energy Facility.<sup>4</sup>

Balancing Authorities (Duke Energy and Progress Energy) that provide energy balancing and accounting at the transmission level, use NC-RETS to upload monthly production data for Renewable Energy Facilities that are interconnected to their transmission systems.

## 2.2 Establishing an Account

Any person or entity wanting to participate in NC-RETS must establish an Account. Accounts should be established in accordance with the timeline for certificate creation (see Section 6.2) to ensure Certificate eligibility.

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<sup>2</sup> Some municipal utilities and electric membership corporations (EMCs) have contracted with a power agency, GreenCo Solutions, Duke Energy, or Progress Energy, to act as a Utility Compliance Aggregator that will manage and report compliance with the Portfolio Standard on behalf of that municipal utility or EMC.

<sup>3</sup> If a facility already participates in PJM's Generation Attribute Tracking System (GATS), it does not need to also participate in NC-RETS. This may be the case if the facility is located in Dominion's service territory.

<sup>4</sup> "Qualifying MWh" is one that was produced by a fuel that qualifies under Session Law 2007-397 at a facility that has been registered with the Commission as a Renewable Energy Facility. NC-RETS does contain the functionality to apply multipliers in exceptional cases such as the Duke off-shore wind turbines, where one MWh will create more than one REC.

Registrants will provide basic Account registration information, such as Account Holder name, address and contact information, to the NC-RETS Administrator through a secure web-page on the NC-RETS website<sup>5</sup> and agree to the Terms of Use. (The Terms of Use are available for review on the NC-RETS website, [www.ncrets.org](http://www.ncrets.org), under “Documents.”) See [Appendix A](#) for step-by-step instructions. The NC-RETS Administrator reviews the Account application and may request more information before approving or rejecting the application. An Account remains active until terminated. Termination can be initiated by the Account Holder by notifying the NC-RETS Administrator. Accounts can also be terminated if an Account Holder fails to pay the NC-RETS fees or is otherwise in default under the Terms of Use. The Terms of Use describe these issues, as well as additional important terms, and should be read and understood by anyone applying to be an Account Holder.

### **Account Types and Sub-Account Structure**

There are four (4) types of Accounts in NC-RETS:

- **North Carolina Electric Power Supplier Account:** This type of Account can hold, transfer (outgoing and incoming), and Retire Certificates. A North Carolina Electric Power Supplier Account can also register and maintain Projects and have Certificates issued to it for its Projects, including energy efficiency and demand side management programs. A North Carolina Electric Power Supplier Account is the only type of Account that can retire Certificates for compliance with NC’s Portfolio Standard. An organization that provides compliance services for another Electric Power Supplier is called a Utility Compliance Aggregator. Only Electric Power Suppliers and Utility Compliance Aggregators are eligible to establish a North Carolina Electric Power Supplier Account.

In 2010, when North Carolina Electric Power Suppliers (and Utility Compliance Aggregators) first register to open an Account in NC-RETS, they will be required to input (on the Account registration screen) their organization’s 2009 North Carolina retail sales (in MWh). As soon as NC-RETS generates the Account Holder’s first NC-RETS bill on September 1, 2010, the Account Holder’s “prior year retail sales” field will be locked. NC-RETS will use the locked sales data to calculate bills from September 2010 through June 2011. In June of 2011 and each subsequent year, the Account Holder must enter the “prior year’s retail sales” data. Each July NC-RETS will use the new sales data to calculate monthly bills for North Carolina Electric Power Suppliers. For more details, please refer to the Fee Schedule, which is on-line at [www.ncrets.org](http://www.ncrets.org).

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<sup>5</sup> <http://www.ncrets.org>

- **General Account:** This type of Account can register Projects and have RECs issued to it for its Projects. (Before creating Certificates in NC-RETS, a Renewable Energy Facility must first register with the Commission.) A General Account can hold, transfer, and Retire Certificates (for reasons other than compliance with NC's Portfolio Standard). The Account Holder for a Renewable Energy Facility Project can seek eligibility for its facility with Green-e Energy or Low-Impact Hydro Institute (LIHI). If accepted by those organizations, NC-RETS can indicate such eligibilities on Certificates issued for output from the facility.
- **Qualified Reporting Entity (QRE) Account:** An Account Holder with a QRE Account is assigned to a Project and is responsible for providing energy production information such as monthly meter readings for that Project. A QRE Account cannot hold Certificates. The QRE uses its NC-RETS Account to upload meter reads or monthly settlement data for each Project to which it is assigned. An Electric Power Supplier should have a QRE Account if it reads the production meter for Renewable Energy Facilities, or if it is a Balancing Authority.
- **Program Auditor Account:** This type of Account will allow Commission and Public Staff to perform compliance review and auditing of program data as needed.

Accounts that can hold Certificates (North Carolina Electric Power Supplier and General Accounts) are given three types of Sub-accounts automatically by default when their Account is approved (Active, Retirement and Export Sub-accounts). An Active Sub-account is used to organize Certificates based on an organization's business structure as desired. The default Retirement Sub-account is used to Retire Certificates for voluntary reasons (that is, reasons other than compliance with NC's Portfolio Standard). The Export Sub-account is used to transfer Certificates to another tracking system. The Account Holder has the ability to rename these default Sub-accounts and create as many additional Active and Retirement Sub-accounts as necessary to meet their organization's needs. Retirement Sub-accounts cannot be renamed if they hold Certificates. When Certificates are issued, they are placed into an Active Sub-account that was designated when the Project was registered with NC-RETS. When an incoming Certificate transfer is pending, the recipient Account Holder identifies the Active Sub-account into which the Certificates will be deposited. Each Account Holder will be able to view a listing of Certificates held in each Sub-account and their attributes (e.g. static Project details, eligible program certifications and Certificate origination details).

Accounts that can hold Certificates also have a single Bulletin Board Sub-account, used to post Certificates for sale on the NC-RETS Bulletin Board.

Each Account and Sub-account has a unique identification number. For ease of reference, Account Holders may attach aliases to Sub-accounts (e.g., by customer or by product name).

North Carolina Electric Power Suppliers and Utility Compliance Aggregators will have the ability to create Compliance Sub-accounts. Compliance Sub-accounts can only be used to Retire Certificates for the Portfolio Standard. A Compliance Sub-account is established for a specific compliance year, and the Account Holder must designate whether the Sub-account is subject to the compliance obligations of an electric public utility or the compliance obligations of a municipality / electric membership corporation or a group of municipalities / electric membership corporations.

### **2.3 Deposits to Active Sub-Accounts**

There are four ways that Certificates are deposited into an Active Sub-account.

- (e) Within an Account, Certificates can be transferred from one Active Sub-account or Bulletin Board Sub-account to another.
- (f) An Account Holder can accept a transfer of Certificates from another Account Holder.
- (g) Certificates can be generated by a Project and deposited by the NC-RETS Administrator into the Sub-account assigned to the Project.
- (h) Certificates can be transferred into a Compliance Sub-account prior to the Compliance Sub-account being submitted for review by the Commission and Public Staff.

### **2.4 Transfers from Active Sub-Accounts**

There are two ways to withdraw or remove Certificates from Active Sub-accounts:

- (c) Transfer the Certificates to the Sub-account of another Account Holder.
- (d) Transfer the Certificates to another of the Account Holder's own Sub-accounts (Active, Retirement, Export, Compliance, or Bulletin Board Sub-account).

Certificates that have been deposited in a Compliance Sub-account cannot be moved out of that Sub-account once the Electric Power Supplier or Utility Compliance Aggregator submits the associated Portfolio Standard Compliance Report to the Commission for review.

## 2.5 Retirement Sub-Accounts

A Retirement Sub-account is used as a repository for Certificates that the Account Holder wants to designate as voluntarily retired. There are three ways that Certificates are deposited in a Retirement Sub-account:

- (d) Within an Account, Certificates can be transferred from an Active Sub-account or a Bulletin Board Sub-account to a Retirement Sub-account.
- (e) An Account Holder can accept a transfer of Certificates from another Account Holder directly into a Retirement Sub-account.
- (f) Certificates can be transferred from a Compliance Sub-account to a Retirement Sub-account prior to the Compliance Sub-account being submitted for review by the Commission and Public Staff.

An Account Holder choosing to retire a Certificate or a block of Certificates will use the transfer screen to identify the quantity of Certificates to Retire and the reason for Retirement. The Account Holder must select the Retirement Sub-account to which the Certificates will be deposited. The Retirement Sub-account will show the Serial Numbers of the Certificates Retired, the date of Retirement and the reason for Retirement. In addition, there will be a mechanism to view the Project characteristics and Certificate fields associated with the Retired Certificates. *Once Certificates are Retired, they cannot be moved or transferred out of the Retirement Sub-account to any other Sub-Account or Account Holder.*

NC-RETS validations ensure that Certificates deposited in a Retirement Sub-account are no longer transferable to another party or another Sub-account. NC-RETS reports allow Account Holders to show evidence of the Retirement.

## 2.6 Compliance Sub-Accounts

A Compliance Sub-account will be available to North Carolina Electric Power Suppliers and Utility Compliance Aggregators only. These entities can have one electric public utility Compliance Sub-account per compliance year and an unlimited number of municipal utility / electric membership corporation type of Compliance Sub-accounts per year. For example, for 2010, an Electric Power Supplier can have one Compliance Sub-account for itself (as an electric public utility) and 1 or more for each municipality/coop or group of such electric power suppliers for which it provides compliance reporting. Each Compliance Sub-account will be subject to the statutory requirements for either: 1) an electric public utility, or 2) a municipal utility/electric membership corporation (cooperative). Certificates in a Compliance Sub-account will be in a “pending retirement status” while the State Program Auditor/Regulator accesses it via a compliance report for audit. When that review and the related regulatory proceeding are complete, the Commission will use

NC-RETS to finalize Retirement of the Certificates into a permanent Retirement status. State Program Auditors will see the related Compliance Report from their own Accounts.

There are two ways that Certificates are deposited into a Compliance Sub-account:

- (c) Within an Account, Certificates can be transferred from an Active Sub-account or a Bulletin Board Sub-account to a Compliance Sub-account.
- (d) An Account Holder can accept a transfer of Certificates from another Account Holder directly into a Compliance Sub-account.

The NC-RETS Administrator is not responsible for the Retirement of Certificates by Account Holders, as it relates to voluntary or compliance-related Retirement deadlines or otherwise.

## **2.7 Transfers Between Accounts**

North Carolina Electric Power Supplier and General Account Holders may transfer Active Renewable Energy Certificates to other Account Holders. Certificates will be specified by their Serial Numbers. The Account Holder will select the recipient from a pull-down list of Account Holders. After the transfer has been initiated, the Certificates that are pending transfer will be marked as “transfer pending” in the Account Holder’s Outbox. This will have the effect of “freezing” the Certificates so that they cannot be moved to another Sub-account or to another Account Holder.

After the transfer has been initiated, NC-RETS will send an electronic notification of the request to transfer Certificates to the proposed recipient. The transfer recipient can review the Certificate transfer details from the Account Holder’s Outbox and must confirm or reject the transfer within fourteen (14) calendar days of when it was requested by the transferor. If rejected, the Certificates will be deposited back into the originating transferor’s Sub-account. If confirmed, the transfer recipient must designate the Sub-account to which the Certificates are to be delivered. As soon as the recipient has confirmed or rejected the transfer, NC-RETS will send an electronic notification to the transferor indicating the action taken. The transferor may cancel any transfer before such transfer has been confirmed by the recipient by withdrawing the transfer from the Account Holder’s Outbox in NC-RETS. If the transfer is withdrawn, NC-RETS will notify the recipient of the action.

## **2.8 Compatible Tracking Systems**

NC-RETS is set up to accept transfers of eligible Certificates from compatible tracking systems. A compatible tracking system is a system that has set-up up a process with NC-RETS on how to handle imports and/or exports and

implemented the required technology. NC-RETS is working towards setting up imports and exports with all registries that track generation from facilities that have been approved by the NC Commission. Appendix F lists the compatible tracking systems at the time of NC-RETS launch. This list is also posted at [www.ncrets.org](http://www.ncrets.org) and will be updated as more registries are deemed to be compatible.

### **2.8.1 Imports from other Tracking Systems**

Only Certificates from facilities and fuel types that have been approved by the Commission can export Certificates to NC-RETS. In order to import a Certificate from another tracking system the Account Holder in the exporting tracking system will need to follow that tracking system's procedures for an export. This generally includes designating a specific batch of Certificates for export and designating the importing registry (i.e. NC-RETS) and the importing NC-RETS Account Holder (Account ID and name).

The NC-RETS Account Holder will see the imported Certificates in their Inbox module. Under the "From" column, the registry from which the RECs are coming will show in the Inbox module. The Certificate transferor will be the NC-RETS Administrator.

The imported Certificates will have a unique Serial Number that references the originating registry instead of NC-RETS. The Certificate data screen will also contain the original Serial Number from the issuing registry. All Projects from which Certificates have been imported into NC-RETS will be listed on the public 'Imported Facility Report.' No information about the quantity transferred and the parties involved in the transaction will be publicly posted.

Tracking systems track fuel types differently. Certificates in NC-RETS will issue with the fuel types used by NC-RETS and that correspond to fuel types approved by the Commission.

#### *2.8.1.1 Multi-fuel Facilities that use Swine and/or Poultry Waste*

Only NC-RETS and the North American Renewables Registry (NAR) currently can track swine waste and poultry waste Certificates separately from other kinds of biomass used in a Multi-fuel Facility. If a NC-RETS Account Holder is planning to import Certificates from a Project that is (1) registered in a tracking system other than NAR, and, (2) using more than one type of biomass, and, (3) where one or more of the fuels is swine and/or poultry waste, then additional procedures are needed to correctly differentiate swine and/or poultry waste Certificates from other biomass Certificates. NC-RETS

Account Holders contracting for such Certificates should contact the NC-RETS Administrator before the export is initiated from the exporting tracking system. The NC-RETS Administrator and the Commission will ask the NC-RETS Account Holder for Project specific information (i.e. fuel deliveries, generation data etc.) needed to substantiate that swine and/or poultry waste generated the energy associated with the RECs.

If the Project only uses one biomass fuel (i.e. swine waste or poultry waste) the above procedure is not needed.

### **2.8.2 Exports to other Tracking Systems**

In order to export a Certificate to another tracking system the NC-RETS Account Holder will designate a specific batch of Certificates for export and designate the registry and Account Holder (Account ID and Name) to whom the Certificates should be delivered.

After the transfer has been initiated, it will show up in the NC-RETS Account Holder's Outbox module as "Pending." It will remain "Pending" until the NC-RETS Administrator confirms that the Certificates are eligible for export to the importing tracking system.

## **3 Access to Accounts and Confidentiality**

### **3.1 Account Access**

An Account Manager is established as part of the Account registration process. The individual listed in the initial Account application will be considered the Account Manager and have the ability to setup and manage any additional User logins and login privileges for his or her organization. The Account Manager will have full access to the organization's Account. The Account Manager can customize login permissions to allow view-only access to information or to allow the User to perform activities such as transfers and submitting/updating information. Such privileges can also be further attached to specific Sub-accounts or Projects. This provides Account Holders with significant flexibility when assigning Users to specific tasks or roles. User login setup can be done during the Account registration process or at any time the Account Manager wishes to add Users to the Account. The Account Manager supplies contact information for each User and designates their login name and password.

**NOTE:** The NC-RETS Terms of Use shall apply to any person who receives access to an NC-RETS Account or Sub-account from an Account Holder or Account Manager.

Once a User login is established, NC-RETS sends an email to the login contact specified by the Account Manager with details on the individual's login name. The Account Manager is required to communicate the password to the new User. Upon logging into NC-RETS for the first time, the new User is prompted by NC-RETS to change his or her password. The new User can then perform the functions or view the information per the permissions granted by the Account Manager. The Account Manager or NC-RETS Administrator may at any time remove or add permissions to a User by using the Account administration screens.

The NC-RETS My Event Log report tracks and displays all actions performed within the Account by login name and timestamp. Account Managers have access to the My Event Log report for their Account and Sub-accounts.

### **3.2 Levels of Account Access**

When an Account Holder creates logins for additional Users, the Account Holder assigns to the User one of two levels of specific access rights:

#### **3.2.1 Account Holder – Supervisor**

When completing the login profile for a new User, the Account Manager can assign them “Account Holder – Supervisor” privileges. Such a new User is able to register Projects, manage Certificates, and create additional logins, if necessary. The Account Manager can also give this User a subset of these privileges if needed.

#### **3.2.2 Account Holder – View Only**

When completing the login profile for a new User, the Account Manager can assign the User “Account Holder – View Only” privileges. This provides the User with limited view rights. The Account Manager will then identify the specific Sub-accounts and Certificates that the User will be able to access and view.

### **3.3 Confidentiality**

As stated in the Privacy Policy [[www.ncrets.org](http://www.ncrets.org)] and the Terms of Use, certain Account information is held confidential. Account information is only used and released by NC-RETS in aggregate through the public reporting process.

## **4 Project Registration**

Within NC-RETS and all related NC-RETS documents, the term “Project” is used to refer both to (1) a generating Project, which is a Renewable Energy Facility registered with the Commission, accepted by the NC-RETS Administrator and for which NC-RETS issues Certificates, and (2) an energy efficiency Project, which is registered with NC-RETS by an Electric Power Supplier for its energy

efficiency or demand-side management programs, or a Utility Compliance Aggregator on behalf of an Electric Power Supplier. (Note: only municipal utilities and electric membership corporations can use their demand-side management programs for Portfolio Standard compliance.) Once a Project is registered within NC-RETS, monthly production data or annual energy savings can be uploaded to NC-RETS to create Renewable Energy Certificates or Energy Efficiency Certificates. Step-by-step instructions for registering a Project can be found in [Appendix B](#).

#### **4.1 Registering a Project**

To ensure that double-counting does not occur, Renewable Energy Facilities registered in NC-RETS must have 100% of their output tracked by NC-RETS (with the exception of imported Certificates). If a Renewable Energy Facility or an associated contract for its production was registered in another tracking system at one point, the NC-RETS Administrator should be notified of this during the registration process and the Account Holder should be prepared to provide documentation to prove the Renewable Energy Facility (and, if applicable, its associated contracts) have been removed from the previous tracking system.

The owner, or Responsible Party, of a Renewable Energy Facility must first establish an Account within NC-RETS as described above and then register a Project as a Renewable Energy Facility or an Energy Efficiency Project, as the case may be, before NC-RETS can certify and issue Certificates attributable to it. The Account types that can register Renewable Energy Facilities are the NC Electric Power Supplier Account and the General Account. Only the NC Electric Power Supplier Account can register energy efficiency Projects in NC-RETS.

To register a Renewable Energy Facility or an energy efficiency Project (which would include DSM programs), the owner or the Responsible Party must:

- Have an approved Account in NC-RETS;
- Have registered with the Commission and received approval from the Commission for the Renewable Energy Facility; and
- Submit a completed on-line registration form containing information related to the characteristics of the Renewable Energy Facility or energy efficiency Project. (Note: Many Electric Power Suppliers will have several energy efficiency programs – their energy savings will be uploaded into one Project.)

The NC-RETS Administrator will review the information provided and request additional information as needed before approving a Renewable Energy Facility registration request in NC-RETS.

## 4.2 Multi-fuel Renewable Energy Facility Project

A Multi-fuel Renewable Energy Facility Project is one that produces energy using more than one Fuel Type. A Multi-fuel Renewable Energy Facility Project can use a renewable fuel with a fossil fuel or use multiple types of renewable fuels. Such facilities must register with NC-RETS as a Multi-fuel Renewable Energy Facility Project. If the relative quantities of energy produced from each fuel cannot be measured or calculated, and verified, the facility is not eligible to register as a Multi-fuel Renewable Energy Project in NC-RETS.

Each Certificate issued for a Multi-fuel Renewable Energy Facility Project will reflect only one Fuel Type. The total number of Certificates issued for a Fuel Type in a reporting period will be proportional to the energy output from that Fuel Type for that reporting period.

Each NC-RETS Account Holder or Responsible Party that has registered a Multi-fuel Renewable Energy Facility Project must report monthly to the NC-RETS Administrator the proportion of energy output per Fuel Type, by MWh or Btu, generated by the Multi-fuel Renewable Energy Facility Project during that month, calculated according to the applicable provisions of Section 5.9.1. Though energy produced from all Fuel Types must be reported, NC-RETS will only issue Certificates for the qualified renewable energy. Certificates will not be issued until such information is provided by the Account Holder or Responsible Party.

The procedures and methodologies used by the Account Holder or Responsible Party to calculate the contribution of each Fuel Type should be retained by the Account Holder or Responsible Party according to Commission rules, and will be subject to audit by the Public Staff and the Commission.

To import Certificates from multi-fuel generators, see Section [2.8.1](#).

## 4.3 Verification of Static Data Submitted During Project Registration

Upon completion of the Renewable Energy Facility Project registration process, the NC-RETS Administrator will review attestations, Energy Information Administration reports and other data sources to verify the information provided by the Account Holder.

In the event data submitted is found to be incorrect or if there is a discrepancy between the information submitted during the on-line registration process and the materials provided to verify the information, the NC-RETS Administrator will notify the registrant that the information could not be positively verified. A process of either correcting the registration form, or withdrawing the

registration form, or providing proof that the information on the registration form is correct will ensue between the NC-RETS Administrator and the registrant until the NC-RETS Administrator is satisfied that the information provided meets NC-RETS standards for accuracy. If any issues arise, the NC-RETS Administrator will raise them with the Public Staff in case a site visit is needed to verify the legitimacy of Project registration and generation data.

#### **4.4 Updating Static Data**

After the initial Project registration in NC-RETS, Account Holders should continually notify NC-RETS of the following actions or occasions that will have the effect of changing Static Data tracked by NC-RETS:

- (e) A change in Fuel Type for a Renewable Energy Facility, and the date on which the change occurred, within fifteen (15) calendar days from when the change is implemented. (The Account Holder should also notify the Commission, referencing the docket number from its registration order.)
- (f) A change in Project ownership, and the date on which the change occurred, within fifteen (15) calendar days after the change occurs. A change in ownership must be confirmed by a letter signed by both the prior and new owners of the Project, and provided to the NC-RETS Administrator. Neither NC-RETS nor the NC-RETS Administrator will be responsible for depositing Certificates into an Account that no longer represents a Project if the incorrect deposit occurs as a result of a lack of notification by the prior and new owners of the Project. Parties should arrange for a meter-reading to occur coincident with the ownership change. This meter read will be used to determine the final REC issuance to the original owner. Subsequent production data will be used to generate RECs that will be issued to the new owner. (A facility owner must notify its QRE of any change of ownership. A new owner must also register the facility with the Commission.)
- (g) A change in a Project's eligibility for any programs or certification tracked by NC-RETS. This must be communicated by the Account Holder before any Certificates affected by the change are issued or within fifteen (15) calendar days after the change occurs, whichever is sooner.
- (h) A change to any of the "essential generating characteristics" of the Project.

#### **4.5 Misrepresentation of Static Information:**

Account Holders can be removed from NC-RETS for cause, including misrepresentation of Static Data. NC-RETS reserves the right to withhold issuing Certificates, to freeze a Sub-account or Account associated with a particular Project, or to withhold participation in NC-RETS for Projects that have willfully misrepresented Static Data. If the NC-RETS Administrator has

cause to suspend the Project's participation in NC-RETS, no Certificates will be created while the Project is under suspension. While under suspension, metering data may continue to be uploaded to the Project by the QRE but it will not contribute to Certificate creation. Upon removal of the suspension, Certificate issuance can proceed.

#### **4.6 Terminating a Project's Participation in NC-RETS**

If a Project's owner or Responsible Party wants to remove a Project from NC-RETS, they can do so by notifying the NC-RETS Administrator and specifying the following:

- (d) The date the Project should be/will be removed from NC-RETS;<sup>6</sup>
- (e) The name of the Project's Qualified Reporting Entity, if applicable; and
- (f) The Sub-account to which Certificates should be deposited (if the usual Account for deposit is being closed as well).

NC-RETS will issue Certificates for a Project up to the date of Project termination as instructed by the Project's owner or Responsible Party. No Certificates will be issued for adjustments that occur after the termination date. If the Account to which the Project is linked is also closed at the same time, the Project's owner or Responsible Party must also specify the Account to which any remaining Certificates that have not yet been issued should be deposited. Failure to do so will result in loss of Certificates.

#### **4.7 Changing the Account (Owner) with which a Project is Associated**

If the Project's owner or Responsible Party wants to change the Account with which a Project is associated, they can do so by notifying the NC-RETS Administrator and providing the information requested by the NC-RETS Administrator, including, but not limited to:

- (d) The new Account number with which the Project will be associated;
- (e) The date the change will be effective; and
- (f) Any documentation required for legal purposes or to meet certification requirements.

Certificates from the Project that were created up to the day the Account change takes effect will remain in, or be deposited into, the Account that the Project was associated with at the time the generation occurred. For example, if a Project's owner changes the Account with which the Project is associated from Account A to Account B, and the change is effective on March 1,

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<sup>6</sup> This is the same as the final date of generation for which Certificates are to be issued.

then the Certificates relating to generation that issued prior to March 1 will be deposited into Account A. Any issuance from the Project after March 1 will go into Account B.

The NC-RETS Administrator will need written confirmation of this change from both parties involved in the Project transfer in order to implement the change. When changing the Account with which a Project is associated, there cannot be any time when the Project is not associated with an Account. If there is such a lapse, this will be treated as a deregistration/re-registration of the Project instead of a change of Account. (Note: Project owners also need to inform the Commission of a change in ownership, referencing the docket number that the Commission assigned to their registration order.)

## **5 Dynamic Data in NC-RETS – Generation Data – Role of Qualified Reporting Entity**

### **5.1 Qualified Reporting Entity (QRE) Guidelines**

A QRE is a Balancing Authority, an Electric Power Supplier, or a federal or municipal power agency. They provide production data to NC-RETS for Renewable Energy Facilities at least monthly. A Balancing Authority provides data consistent with its monthly settlements process. Other QREs provide data from routine meter readings. Each QRE adheres to the following guidelines:

1. A QRE that must also comply with the Portfolio Standard shall demonstrate that its employees who are responsible for reporting facility production data are separated organizationally from its employees who are responsible for Portfolio Standard compliance. “Separate from” means that the QRE employee(s) work in a separate department, division, section or unit that is not responsible for planning for, demonstrating or assuring Portfolio Standard compliance. The NC-RETS Administrator may make exceptions for extremely small Electric Power Suppliers after consulting with the Commission. However, in no event shall the employee who creates or uploads production data be the same employee who uses NC-RETS for compliance purposes.
2. A QRE creates a QRE Account in NC-RETS. The NC-RETS Administrator will validate the application information that it submits.
3. Upon approval, each QRE is added to the list of QREs available for selection by a Project. Upon registration, a Project will have to provide a unique ID that is assigned by the QRE, which links its facility to the QRE. NC-RETS will provide each QRE with a list of the Projects that have selected it. When a new Project selects the QRE, the QRE will be notified via e-mail.

4. A QRE will at least monthly provide electricity production data to NC-RETS that is inherently reliable and auditable. If the meter-read period spans parts of two months, the QRE shall assign the usage to the later month.
5. Reported electricity production data shall be financial settlement quality data from revenue quality meters, which would include those that meet ANSI-12 standards.
6. Each QRE shall upload data to NC-RETS. The QRE must use a valid active NC-RETS login and password associated with its NC-RETS QRE Account. After logging into the Account, the QRE Account Holder should locate the Meter Data Loading module. To locate the desired generation output file, the User selects the Meter Data Loading module's "browse" button to display a pop-up screen where the User can locate the desired file on computer or network drives. After selecting a file, the User selects the "Year" and then the "Upload Now" button to upload the file. The file must be formatted in ASCII Text with data fields delimited by commas (Comma-Separated Value (CSV) format).

The following example shows a conforming input file.

```
PROJECTID,REPORTINGENTITYID,VINTAGE,FROMDATE,TODATE,
TOTALMWH
114,2A58A68,08/2010,08/01/2010,08/31/2010,100
```

The fields are as described in the following table:

Field Name	Data Type	Description
PROJECTID	Integer	Unique NC-RETS identifier for the Project assigned by NC-RETS upon Project approval.
REPORTINGENTITYID	Integer and Character(50)	Unique identifier for the Project assigned by its QRE from the QRE's internal systems.
VINTAGE	Numeric Character(7)	Month and year of production, formatted as MM/YYYY for any month in the current reporting period

FROMDATE	Numeric Character(10)	Begin month-day-year of production output period formatted as MM/DD/YYYY
TODATE	Numeric Character(10)	End month-day-year of production output period formatted as MM/DD/YYYY
TOTALMWH	Floating decimal	Total MWhs for reporting period, with three spaces beyond the decimal

A current period output file can be loaded as many times as needed adhering to the following restrictions. (1) After an Account Holder has explicitly accepted the posted output data, NC-RETS will not accept re-loaded data for the same production period. NC-RETS will reject an attempted re-loaded. If the Account Holder has not yet accepted, the QRE can re-load the data, the previous data will be over-written and the Account Holder will receive notification of new data being posted. Otherwise, the QRE should contact the NC-RETS Administrator, who can re-load the file if it is appropriate to do so. (2) If NC-RETS has accepted the data or the Account Holder has disputed the data, and no Certificates have yet issued, a QRE can re-load the data. In all other instances, the QRE should work with the NC-RETS Administrator if it believes data needs to be re-loaded.

NC-RETS will validate a Project’s uploaded data before posting the output into the NC-RETS data base. When all validations<sup>7</sup> are successfully completed, the data is loaded into the database and can be seen in a Project’s Generation Activity Log. If the Project fails to produce energy in a given month, a QRE should report by uploading “zero” to be accepted by the Account Holder. NC-RETS then notifies the Account Holder via email that generation output has been loaded for the Project, and the data is available to be reviewed for approval or dispute.

## 5.2 Generation Data Requirements

NC-RETS will not create Certificates for generation supplying Station Service. Data used to issue Certificates for Renewable Energy Facilities must be derived from a Qualifying Meter or Qualifying Estimate and communicated to the NC-RETS Administrator.

<sup>7</sup> Validations include correct assignment of QRE, assessment of engineering feasibility of output, potential overlap of reporting period with prior uploads, data exceeds 35 days reported for a given vintage, and whether data for a previous period remains subject to dispute.

For Renewable Energy Facilities whose output is settled monthly by a Balancing Authority, a “Revenue-Quality Meter” is the data source used by the Balancing Authority for settlements. The data must be electronically collected by a meter data acquisition system, such as an MV-90 system, or pulse accumulator readings collected by the Balancing Authority’s energy management system, and verified through a Balancing Authority checkout/energy accounting or settlements process that occurs monthly. The preferred source for the data is a meter data acquisition system. If the Balancing Authority does not have an electronic source for collecting revenue meter data, then manual meter reads will be accepted.

When a QRE submits generation data (either manually entered or uploaded via file) NC-RETS validates the data to verify its engineering feasibility. To perform the validation, NC-RETS uses the following required variables from the Generating Project Registration screen:

- Nameplate Capacity
- Capacity Factor or Maximum Annual Energy

Data validation is performed for both current period reporting and Prior-Period Adjustment reporting, regardless of whether the data is loaded as a file or entered manually in the Project’s Self-Reporting Interface. To determine the feasibility of the submitted data, NC-RETS will use the following equations:

For those Projects with a registered “Capacity Factor”:

$$(\text{Nameplate Capacity}) * (\text{Capacity Factor}) * (\text{number of hours in the duration}) * (1.02)$$

For those Projects with a registered “Maximum Annual Energy”:

$$(\text{maximum annual energy})/(\text{8760 hours in a year}] * (\text{number of hours in the duration}) * (1.02)$$

The number of hours in the duration is based on the duration of the generating period each time the information is reported on the Project. To determine the duration value, NC-RETS will calculate the number of hours in the generating period (for example, the number of hours in the generating period with a Begin Date of January 1, 2006 and an End Date of January 31, 2006 would be 744). The 1.02 will allow for a margin of error.

If the validation is successful, and the reported energy production is less than or equal to the maximum feasible generation for the facility, the data becomes available to the Account Holder to review and then accept, or dispute. If the Account Holder accepts the data, it will be included in the next Certificate issuance cycle. For Prior-Period Adjustments, the data will contribute to the next Certificate issuance after it was accepted (either by the Account Holder, or auto-accepted by NC-RETS).

If the loaded data fails the engineering feasibility validation, the QRE will be prompted with a “soft” warning as to the failed validation. The QRE has the ability to continue posting the data by selecting the “continue” button on this pop-up screen. If the QRE wishes to continue posting data, NC-RETS will send an automated email to both the NC-RETS Administrator and the Account Holder that the data loaded for their Project has failed the engineering feasibility validation, but that the QRE has decided to have the data posted to the database anyway. The notification will also state that the data has a status of “NC-RETS Pending” until either corrected, or approved by the NC-RETS Administrator. Data with this status will not contribute to Certificate creation. The QRE can instead decide to not post the data to the database as a result of the failed validation by selecting the “cancel” button on this same pop-up screen. Selecting cancel will discontinue the data loading process for the Project in question and no notifications will be sent.

For all loaded data, the NC-RETS Administrator will have a report “Engineering Feasibility Estimate Calculations Report” which will list all Projects that have had data loaded, the amount of output loaded, and the feasibility pass/fail result.

**NOTE: Failed validation for a single facility does not result in a failure to load the entire file – only the data for the facility that failed the validation.**

### **5.3 Measurement of Generation and Adjustments**

The output from each Renewable Energy Facility Project registered in NC-RETS will be measured at the point of interconnection to the transmission or distribution company’s facility. Losses occurring on the bulk transmission or distribution systems after the metering point are not reflected in the Certificates created. NC-RETS will not create Certificates for that portion of the generation that is used to supply Station Service, and therefore, generation data should also be netted of Station Service supplied from the generator’s side of the point of interconnection. For Renewable Energy Facilities also serving onsite loads, NC-RETS will create Certificates for the on-site load distinct from Station Service, if the facility’s owner or Responsible Party can provide evidence that the metering used is capable of distinguishing between on-site load and Station Service. If adjustments are needed, due to metering, reporting, error or any other reason, the QRE must report the adjustment as soon as possible to the NC-RETS Administrator. If Certificates have not yet been created for the original generation amount to which the adjustment applies, the Certificate or debit will be posted to the Generation Activity Log, and will be reflected in the number of Certificates created. If Certificates have been created, the adjustment will be treated as a Prior Period Adjustment described below in Section 5.4.

## **5.4 Prior Period Adjustments**

Adjustments can be requested by an Account Holder, including Self-Reporting Facilities, or a QRE, after the data is reported and used to issue Certificates in NC-RETS. These adjustments are known as Prior Period Adjustments. The Account Holder accesses the Project Output Data Review screen to submit an adjustment to the NC-RETS Administrator. If accepted by the NC-RETS Administrator, the Certificate or debit to the generation volume reported in the current month will post to the Generation Activity Log. Consequently, the adjustment will be realized when Certificates are next issued. If new Certificates are created, the vintage of the Certificates shall reflect the actual generation period. NC-RETS will not accept adjustments for generation reported more than one year prior.

## **5.5 Notification of Adjustments**

The Account Holder will be informed of all positive or negative adjustments once the adjustment has been posted to the Generation Activity Log. Once NC-RETS informs the Account Holder of a need for adjustment, the Account Holder then has fourteen (14) calendar days to dispute or accept the adjustment. If after fourteen (14) days the Account Holder has failed to respond, the NC-RETS Administrator will automatically accept and create the adjustment.

## **5.6 Data Collection Procedure**

Energy-generation data should be reported within 30 days of the meter read and will be accepted by the NC-RETS Administrator on an ongoing basis. Currently, NC-RETS can accommodate data in batches that contain up to 35 days of production data. Data files are to be electronically transmitted to NC-RETS using a secured protocol and a standard format specified by the NC-RETS Administrator. The data shall reflect, at a minimum, the month and year of the generation, monthly accumulated MWhs for each NC-RETS Project ID and the associated NC-RETS and Project ID(s) for each Project. The owner of the Generating Project, as the owner of the metered data, or the Responsible Party, has the responsibility to direct the QRE to release generation data to NC-RETS.

The data must be transmitted by a single entity, which must be either (1) a QRE Self-Reporting Facility.

## **5.7 Special Requirements for Self-Reporting Facilities Only**

A Self-Reporting Facility must enter actual cumulative meter readings measured in kWh / MWh or Btu (which will be converted to MWh) and the date of the meter reading via the Self-Reporting Interface. Actual cumulative meter readings must be entered no less frequently than annually. If a Self-Reporting Generator chooses to report data in cumulative over the course of multiple months (for example, 01/2010-06/2010), it can do so by

uploading the data for the most recent vintage month (06/2010) and providing evidence of the monthly breakdown quantity to the NC-RETS Administrator. Self-Reporting Facilities that do not enter meter readings via the Self-Reporting Interface as required will receive a reminder notice by email from the NC-RETS Administrator. Self-Reporting Facilities risk having their Project de-activated in NC-RETS if they do not provide meter readings at least annually.

## 5.8 Generation Activity Log

Each Project registered in NC-RETS will have a Generation Activity Log associated with it. The Generation Activity Log is an electronic ledger where generation is posted prior to Certificate creation. Each time generation data is received by NC-RETS for a particular Project, the date and quantity of MWh is posted to the Generation Activity Log. Similarly, adjustments received will be posted likewise. The status of each entry in the Generation Activity Log will be noted, where the possible values are:

- **NC-RETS Accepted:** This label is used for all generation that has been reported to NC-RETS, has passed the NC-RETS feasibility test and has been logged to the Generation Activity Log, but has not yet been accepted (or disputed) by the Account Holder.
- **NC-RETS Pending:** The NC-RETS Administrator is waiting for the resolution of a situation before the Certificates can be issued. For example, if the NC-RETS Administrator is waiting to receive a Fuel Type allocation from a Multi-fuel Generation Project or other update from a Generating Unit.
- **Account Holder Accepted:** The Account Holder has accepted the posted generation, but the Certificates have not yet been issued.
- **NC-RETS Admin Accepted:** The NC-RETS Administrator has accepted the posted generation, but the Certificates have not yet been issued.
- **Account Holder Disputed:** The Account Holder has disputed the posted amount of generation.
- **NC-RETS Admin Disputed:** The NC-RETS Administrator has disputed the posted amount of generation.
- **Certificates Created:** Certificates have been created.

The status of each entry in the Generation Activity Log will be changed consistent with the information received by the NC-RETS Administrator. Certificates will be issued based on the total whole number of MWh on the Generation Activity Log that are marked "Account Holder Accepted." Only Certificates that are marked as such will contribute to Certificate creation. Any fractional MWh will be rolled forward until sufficient generation is accumulated for the creation of a Certificate. Each time an item is posted to

the Generation Activity Log, the Account Holder will be notified electronically. Account Holders will have fourteen (14) calendar days to accept or dispute any new regular entries to the Generation Activity Log and fourteen (14) days to accept or dispute adjustments. If the Account Holder does not respond, the posting will be automatically accepted after the specified period and Certificates issued.

The Generation Activity Log will include, at minimum, the following entries:

- (k) Account Holder's Name
- (l) Activity Date
- (m) NC-RETS Project ID for associated data posted
- (n) Activity Description identifying Data Submitted, Fractional Data Remaining, Certificates Created, etc.
- (o) Reporting Period Start
- (p) Reporting Period End
- (q) MWh of generation reported to NC-RETS during the current month
- (r) Fuel Type
- (s) Status
- (t) Note (displaying Serial Numbers or data upload file names)

### **5.9 Multi-fuel Generation Projects**

For Multi-fuel Generation Projects, Certificates will be created for the eligible Fuel Type(s) only.<sup>8</sup> Each Certificate issued for a Multi-fuel Generation Project will reflect only one fuel source, with the total number of Certificates issued for a Fuel Type being proportional to the overall output for that reporting period.

After each upload of production data, the Project's Account Holder will be asked to first verify the energy production data, and then input how much of the production is attributable to each Fuel Type. The Account Holder for the facility shall retain for audit supporting documentation related to the derivation of the proportion of electric output per Fuel Type for each period for which the Generating Unit is issued Certificates. Such supporting documentation is subject to audit by state regulators (including the Commission) and the Project's QRE.

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<sup>8</sup> For example, a coal-fired Generating Unit that uses biomass for co-firing can be considered a Multi-fuel Generation Project and have biomass Certificates issued in respect of that biomass-fired generation.

### **5.9.1 Allocating Output for Each Fuel Source**

For purposes of creating Certificates reflecting the fuel source mix of Multi-fuel Generation Projects, the proportion of Certificates attributable to each Fuel Type shall be determined consistent with the following rules:

For biomass co-fired with fossil fuels or using fossil fuels for startup or supplemental firing: In each month, the Certificates for each Fuel Type in such Multi-fuel Generation Project will be created in proportion to the ratio of the net heat content of each fuel consumed to the net heat content of all fuel consumed in that month, adjusted to reflect differential heat rates for different fuels, if applicable.

### **5.10 Energy Efficiency Data Requirements**

An Electric Power Supplier that is eligible to demonstrate Portfolio Compliance via Energy Efficiency Certificates, or its Utility Compliance Aggregator, shall create a Project in NC-RETS for that purpose. The Electric Power Supplier (or its Utility Compliance Aggregator) shall use the Self-Reporting Interface to create EECs. The Electric Power Supplier or its Utility Compliance Aggregator shall retain for audit work papers demonstrating how it calculated the amount of EECs to be created. Such work papers shall detail for each customer program the estimated volume of customer participation and related energy savings, adjustments for actual operating results (participation and savings rates) and the findings of measurement and verification analyses.

## **6 Creation of Certificates**

Certificates are issued in whole numbers only. Once a Certificate is created, no changes can be made to that Certificate.

### **6.1 Certificate Creation**

The NC-RETS Administrator will issue one Certificate for each MWh of eligible electric energy or 3,412,000 Btu of eligible thermal energy that is generated or electric energy saved by a Project. Certificates are issued based on the number of whole MWh listed in the Generation Activity Log for a given reporting period. Each Certificate shall have a unique Serial Number. Certificate Serial Numbers shall contain codes embedded in the number. The table below identifies the Serial Number format used in NC-RETS.

**TABLE 2: NC-RETS SERIAL NUMBER IDENTIFIERS**

Identifier	Display Order	Data Type	Length	Range of Codes	Comments
Originating Registry	1	Alpha-numeric	3	NCRETS (WREGIS, ERCOT, GATS, MRETS, MIRECS, NEPOOL & NAR (for Certificate imports))	Used to identify originating registry (especially important for enabling import-exports with other registries)
Unit type	2	Alpha-numeric	4	REC: Renewable Energy Certificate issued for a Renewable Energy Facility or SEPA allocation EEC: Energy Efficiency Certificate issued for an energy efficiency project	Used to identify if the issuance is based on renewable energy generation, energy efficiency project
NC-RETS ID	3	Numeric	6	1 - 999999	NC-RETS Unique ID assigned to each Facility
State	4	Alpha-numeric	2		State Abbreviation identifying the State in which the renewable energy generation occurred. SEPA would be NA. EE or DSM would be NC
Vintage Month	5	Numeric	2	01-12	The month in which the renewable energy and SEPA generation occurred. Not needed for EE and DSM
Vintage Year	6	Numeric	4	2008-2099	The year in which the energy efficiency or renewable energy generation occurred.
Batch Number	7	Numeric	5	Numeric value assigned to the each batch of certificates created 1 - 99,999 unique per source per vintage.	
Serial Block Start	8	Numeric	9	Numeric values assigned by NC-RETS from 1 - 999,999,999.	A number to identify the first certificate in a block of certificates.
Serial Block End	9	Numeric	9	Numeric values assigned by NC-RETS from 1 - 999,999,999.	A number to identify the last certificate in a block of certificates.

**6.2 Process and Timeline for Certificate Creation**

Certificates will not be issued for generation occurring prior to January 1, 2008, and RECs issued in other registries before January 1, 2008, may not be imported into NC-RETS.

Once the generation data (production data as measured by a Qualifying Meter or a Qualifying Estimate) is received by the NC-RETS Administrator and a data validity check is performed, it will post in the Account Holder's "Generation Activity Log" and NC-RETS will notify the Account Holder via email that generation has been posted. The generation posting will be marked "NC-RETS Accepted" on the Generation Activity Log. Once the generation is accepted by the Account Holder, the generation posting will be marked "Account Holder Accepted." The Certificates will issue immediately following this. If the Account Holder takes no action, Certificates will issue in 14 days.

The Account Holder must notify the NC-RETS Administrator if it believes the generation data amount recorded on the Generation Activity Log is inaccurate for any reason. The Account Holder may register a dispute any time after the generation is posted and will have 14 calendar days to do so. While the generation posting dispute is being resolved, the generation posting will be marked "Account Holder Disputed." If the Account Holder does not register a dispute with the NC-RETS Administrator, the Certificates will be created in 14 days.

For Multi-fuel Generation Projects, RECs will not issue until the Account Holder both accepts the generation data and supplies supporting fuel allocation data, as specified in Section 5.9. The Account Holder must submit to NC-RETS the proportion of energy output to be allocated to each Fuel Type. The Account Holder provides the Fuel Type allocation via the Generation Data Review screen located in the Account Holder's Asset Management Module. The fuel allocation information will remain available in NC-RETS for audit purposes. Account Holders must retain for audit the work papers demonstrating how they determined the fuel allocation for each reporting period.

### **6.3 Certificate Creation for Accumulated Generation**

Generation data from Renewable Energy Facilities that have a Nameplate Capacity of 10 kW or less that self-report their output need not be reported monthly and may be accumulated over several months prior to submittal to NC-RETS for Certificate issuance. However, NC-RETS will require the owner to self-report the data in time-increments that do not exceed 35 days. The vintage on the issued Certificate(s) will be the last month and year of generation contributing to one (1) accumulated MWh.

### **6.4 Data Fields Carried on Each Certificate**

Each Certificate carries a list of data fields. Some of these fields may not be applicable for energy efficiency projects.

**TABLE 3: CERTIFICATE DATA FIELDS**

DATA FIELD	COMMENTS
<b>CERTIFICATE DATA:</b>	
Certificate Type	REC or EEC
NC-RETS ID	Unique ID assigned to each Project record in NC-RETS.
Project Type	Used to identify if the issuance is based on a Renewable Energy Facility (including SEPA), or Energy Efficiency Project (including demand side management)
Project Name	Name of Project
Certificate Vintage	Vintage of Generation (month/year for RECs; Year for EEC, including DSM)
Certificate Serial Numbers	See details above
Quantity of Certificates	Total Certificates
Meter Data From:	Year-Month-Date
Meter Data To:	Year-Month-Date
Certificate Creation Date:	Date Certificates were issued in NC-RETS
Cost-Recovery Year:	Year of Cost-Recovery
NC REPS Expiration:	Expiration of NC REPS Eligibility
Utility behind project [EEC only]	Name of Electric Power Supplier running the EE/DSM program(s)
<b>STATIC ASSET DATA:</b>	
State or Province	State or Province facility is located in
Country	Country facility is located in
NERC Region	NERC Region facility is located in
eGrid Sub-Region	eGRID Sub-Region facility is located in
Commenced Operation Date	Date the Facility commenced operation
Fuel Type	Fuel Type abbreviation
Nameplate Capacity	Nameplate Capacity of Facility
Reporting Entity Type	QRE or Self-reporting
Reporting Entity Contact Company or Organization name	Name of QRE, if applicable
Utility to which Facility is interconnected	Utility Interconnect
Hydro Upgrade (Y/N)	Denotes whether Facility has been Upgraded
Upgrade Amount: NA	Denotes the portion, if applicable, of facility that has been upgraded and is eligible to create RECs for upgrade amt.
Re-power date (required if Re-powered Indicator = Y)	Date of re-powering
NC In-State/Out-of-State	Facilities eligible for NC and located in NC; Facilities eligible for NC and located outside of NC but with power delivered to any NC utility. If these certificates are transferred out of the utility account, they lose the NC In-State and become Out-of-State; Facilities eligible for NC and located outside of NC

ELIGIBILITY FOR VOLUNTARY PROGRAMS:	
Green-e Energy Eligible <sup>9</sup>	Denotes eligibility and, if applicable, certification number
LIHI Certified <sup>10</sup>	Denotes eligibility and, if applicable, certification number

## 7 Certificate Errors and Correction

### 7.1 Generation Data Validity Check

All generation data received by NC-RETS will undergo an automatic data validity check to ensure that erroneous and technically infeasible data is not entered into NC-RETS and used to issue Certificates. The data validity check will compare reported energy production to an engineering estimate of maximum potential production, calculated as a function of technology type, associated maximum capacity factor, Nameplate Capacity, Fuel Type and time period since the previous cumulative meter reading was entered. If data entered exceeds an estimate of technically feasible generation, the NC-RETS Administrator will be notified and the generation will be posted to the Generation Activity Log noting the status of failed feasibility. The NC-RETS Administrator will contact the Account Holder if the generation data entered is infeasible.

### 7.2 Certificate Errors Discovered After Certificate Issuance

Once a Certificate is created, no changes can be made to that Certificate. In the event that an error is discovered after Certificates have been issued, the NC-RETS Administrator will contact the Commission to explain the issue. The NC-RETS Administrator and the Commission will determine appropriate action, which could include Retiring Certificates that were created erroneously. (Certificate issuance errors caused by errors made in calculating the relative fuel mix for Multi-fuel Generation Projects will be handled in this manner.) The NC-RETS Administrator may “freeze” Certificates that are implicated in an issuance error until a method of addressing the error is developed. This means that the Certificates cannot be transferred to another Account Holder or Retired until the error is resolved. Certificate issuance errors and their resolution will be logged, and that log made available to the Public Staff and the Commission for audit.

<sup>9</sup> This field is targeted for users who will use NC-RETS for voluntary program certifications.

<sup>10</sup> This field is targeted for users who will use NC-RETS for voluntary program certifications.

## 8 NC-RETS Compliance Requirements

Electric Power Suppliers and Utility Compliance Aggregators will make transfers to the Compliance Sub-account to mirror and support their annual Portfolio Standard compliance filing to the Commission. Certificates in this Sub-account will remain in Active status until the Compliance Sub-account has been reviewed and approved by the Commission. Once approved, the Certificates will be Retired. The Public Staff and the Commission will have access to the Sub-account details.

The process will work as follows:

- 1) Electric Power Suppliers will establish a Compliance Sub-account for a compliance year using the “Create New Sub-Account” link. Reference Section 2.6 for more details about how Compliance Sub-accounts function. The Electric Power Supplier or Utility Compliance Aggregator will select the relevant compliance year and compliance type (electric public utility or municipality/electric membership corporation) to determine the mandates they have to meet via the given Compliance Sub-account. Utility Compliance Aggregators will need to specify the specific Electric Power Suppliers for which they are reporting, along with the prior year retail sales for each of those Electric Power Suppliers. Utility Compliance Aggregators have the option to create a Compliance Sub-account for each municipality or electric membership corporation separately if they so choose. Or, several Electric Power Suppliers (municipality/electric membership corporations only) can be grouped together for purposes of a Compliance Sub-account.
- 2) Electric Power Suppliers or Utility Compliance Aggregators can then proceed to transfer Certificates to the Compliance Sub-account(s).
- 3) From a Compliance Sub-account the Account Holder can access a Compliance Report that displays the quantity achieved and quantity still needed for specific mandates such as solar power, swine waste, and poultry waste, as well as the overall Portfolio Standard mandate, using the mandate requirement reflected in the statute for electric public utilities or municipal utilities/electric membership corporations. The report will also display the proportion of the Certificates that are in-state (including out-of-state RECs bundled with power delivered to NC) and how many are unbundled out-of-state Certificates.
- 4) When the Account Holder has finished their transfers for the compliance year, they will ‘submit’ the Compliance Sub-account for Commission review. This will lock the Certificates in place allowing for the Public Staff and Commission to perform their reviews. No changes to this Sub-account can be made by the Account Holder during this time.

5) The Commission will receive an automatic notification that a report has been submitted for their review. After their review the Commission can select to either 'approve' or 'reject' the Compliance Sub-account. Approval will result in the Certificates being Retired permanently in the Compliance Sub-account associated with the given compliance year. Rejection will reopen the Compliance Sub-account to allow the Account Holder to amend the Compliance Sub-account with the required Certificates after which they can re-submit the Sub-account for Commission review. Status of the Compliance Sub-account can be accessed via the Compliance Reports available to the Account Holder, the Public Staff and the Commission.

## 9 Public Reports

Public reports will be accessible to anybody via the public page on the NC-RETS website. It is expected that additional public reports will be added to meet future needs of Account Holders and Program Administrators using NC-RETS. Public reports are carefully designed to ensure the confidentiality of Account Holder data per the Terms of Use. See the Terms of Use for more information regarding confidentiality.

- **Account Holders.** This report contains a listing of all Account Holders with some limited contact information.
- **NC-RETS Projects.** This report contains a list of current and historic facilities by fuel source with owner information, updated daily as needed. It includes a link to each Project's docket within the Commission's website.
- **RECs Issued- Annual Report.** This report will have a drop-down list beginning with 2008. Data for 2010 RECs Issued will not be posted until April 1<sup>st</sup> 2011. The same will be true with all following years where the data for the previous year is not posted until April 1st. Data to be shown will be an aggregate of RECs issued by fuel type and eligibility.
- **EECs Issued- Annual Report.** This report will have a drop-down list beginning with 2008. Data for 2010 EECs Issued will not be posted until April 1<sup>st</sup> 2011. The same will be true with all following years where the data for the previous year is not posted until April 1st. Data to be shown will be an aggregate of EECs issued per utility that performed the energy savings.
- **Public Utility Compliance Report.** Provides details of each utility's Portfolio Standard compliance filed per year.
- **Imported Facilities Report.** Shows all Renewable Energy Facilities which exported Certificates into NC-RETS.

- **Bulletin Board.** Shows RECs which are posted by Account Holders as being available for purchase.

## 9.1 Account Holder Reports

Account Holder reports for a specific Account will only be accessible to the Account Holder, their designated agents and the NC-RETS Administrator. Account Holders, including all of the Users for an Account, can view up-to-date data in these reports at any time. Current reports include:

- **My Event Log.** This report lists all of the events that have taken place in the Account.
- **My Sub-Accounts.** This provides a list of Certificates held in the Account's Sub-accounts and allows the Account Holder to filter data by specific Active or Retirement Sub-accounts.
- **My Certificate Transfers.** This report provides a comprehensive list of Certificate transfers between Sub-accounts and other Account Holders in NC-RETS.
- **My Recurring Transfers.** This includes transfer details related to Forward Transfers only.
- **My Account Holder Registration History.** This report provides a list of all the changes to the Account Holder registration data.
- **My Project Registration History.** This report provides a list of all the Projects that have been registered in NC-RETS and includes the date of registration, the NC-RETS ID and a link to the Project registration screens.
- **My Generation Activity Log.** This report provides a log of all generation and energy efficiency data loaded into NC-RETS for all of an Account Holder's Projects. It includes both self-reported data and each file uploaded by a QRE.
- **My Generation Report.** This report shows a summary of the data loaded by vintage for each facility.
- **My Compliance Report.** This report provides North Carolina Electric Power Suppliers and Utility Compliance Aggregators the ability to view their Certificates transferred into their Compliance Sub-accounts with built-in calculations to determine if the compliance obligations are being met or not.

- **Non-NC REPS Retirement Report.** This report captures all voluntary retirement for any Account Holder retiring RECs for reasons other than the Portfolio Standard requirement.
- **Cost Recovery Report.** The Cost Recovery Report is only available to NC Electric Power Supplier Accounts. This report lists all Certificates held in the Account with a checkbox for the Account Holder to select all batches of Certificates to be reported for a cost recovery year.
- **My Invoices.** This report lists all NC-RETS invoices that have been issued to the Account Holder including the amount and payment status. The report also includes payment information.

## 10 Data Security

The following are a minimum set of security practice requirements for NC-RETS to ensure data integrity and confidentiality:

- (a) Secured web portal interface with password protection for Static Data collection, User access and reporting.
- (b) Restricted access privileges based on participant and User roles using digital certificates.
- (c) Well-defined system backup and recovery processes.
- (d) Secured file transfer and data upload processes using encrypted communications for all data interfaces

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## Appendix A: Account Holder Registration Process

The following information will guide you through the steps necessary to create an NC-RETS Account. The NC-RETS Administrator is available to assist you throughout the registration process. Please call (888-378-4461) or email [NCRETS@apxenv.com](mailto:NCRETS@apxenv.com).

### STEP 1 – REVIEW NC-RETS OPERATING DOCUMENTS

You should first review the NC-RETS Operating Documents including the Terms of Use, Fee Schedule and Operating Procedures. The documents are on the Documents page (under the Resources tab) on the NC-RETS website ([www.NCRETS.org](http://www.NCRETS.org)).

### STEP 2 – ONLINE REGISTRATION

Go to [www.ncrets.org](http://www.ncrets.org) and select the “Register for an Account” link. A pop-up window will appear with a checklist describing the steps required to register for an Account. Select the appropriate Account Type and click the “Continue Registration” button.

The available Account Types are:

- North Carolina Electric Power Supplier<sup>11</sup>
- General Account
- Qualified Reporting Entity
- Program Auditor

### STEP 3 – ACCEPT THE TERMS OF USE

Read and agree to the NC-RETS Terms of Use (this is your next step after clicking “Continue Registration”). Acceptance of the Terms of Use must be indicated by reviewing all terms; checking each section; and lastly, agreeing to the Terms of Use by pressing the “I Agree” button.

### STEP 4 – COMPLETE ACCOUNT APPLICATION

Upon accepting the Terms of Use, the next screen shows the online New Account Application Form. You will need to complete all required fields that are noted by an asterisk (\*). You must designate at least one person, but may designate two, who would receive emails regarding the status of NC-RETS invoices and payments. Note: It will be possible for the public to view the

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<sup>11</sup> See Page 3 for instructions regarding inputting prior year sales data.

Organization Contact information you provide when your Account is approved by the NC-RETS Administrator.

Upon completing the New Account Application Form and clicking “Submit,” you will receive an email notification to validate/activate your registration. This activation must occur before the NC-RETS Administrator is notified of your pending Account.

#### STEP 5 – ACCOUNT REVIEW

The NC-RETS Administrator will review the Account application. If the Account application is complete and approved, an email notification of Account approval will be sent to the designated Account Manager email address provided in the New Account Application Form. If materials are incomplete or additional information is required, the NC-RETS Administrator will notify the Account Manager. Approved Account Holders may begin using all functions of NC-RETS available to their type of Account.

#### STEP 6 – CREATE SUB-ACCOUNT(S) & ADDITIONAL LOGINS

Upon Account approval, default Sub-accounts are automatically created based on the privileges of your Account type. All NC Electric Service Provider Accounts, and General Accounts will receive one Active, Export and Retirement Sub-account. Additional Sub-accounts can be created and Logins added to an Account.

## Appendix B: Project Registration Process

The following information will guide you through the steps necessary to register a Project in your NC-RETS General or North Carolina Electric Power Supplier Account. The NC-RETS Administrator is available to assist you throughout the registration process. Please call 888-378-4461 or email [NCRETS@apxenv.com](mailto:NCRETS@apxenv.com).

### STEP 1 – Review NC-RETS Operating Procedures

The NC-RETS operative documents detail the requirements and definitions of different types of Projects. The documents are available on:

[www.ncrets.org/resources/documents](http://www.ncrets.org/resources/documents).

### STEP 2 - Register Project

- a. Log in to your Account and from the Manage Projects module, select the "Register New Project" link.
- b. Fill out the information on the New Project Registration page and select "Next."
- c. Continue to fill out the information on the second and third page of the New Project Registration screen and press "Submit."
- d. The NC-RETS Administrator will then be notified of the New Project Registration.
- e. At any time during this process you can save the form and return to complete it at a later time if you do not have all the required information.

Note: Owners of thermal projects will be required to enter their facility's maximum capacity in MW or annual energy production in MWh. To ease the process of registering a new thermal project, owners might want to calculate these conversions prior to starting the registration process.

### STEP 3 - Project Review

The NC-RETS Administrator will review the New Project Registration. For an energy project, the NC-RETS Administrator will compare the registration information to the Commission's order approving the Project as a Renewable Energy Facility. For an energy efficiency project, the NC-RETS Administrator will contact Commission Staff to verify that the electric power supplier is creating a project that is consistent with its REPS compliance plan filed with the Commission. Discrepancies regarding ownership and Project fuel(s) and size will need to be resolved before the Administrator will approve the Registration. If the New Project Registration is complete and approved, an email notification describing account approval is sent to the Account Holder. If materials are

incomplete or additional information is required, the Administrator will notify the Account Manager.

#### STEP 4 – Certificate Issuance

Certificates can be issued whenever metering data is available and has been communicated to NC-RETS. Metering data must come from a QRE (unless the Project is a Self-Reporting Facility). The Account Holder will receive an email indicating that metering data is available for their review. The Account Holder has 14 days in which to dispute the metering data. If the Account Holder takes no action, Certificates will issue in 14 days. In addition, the Account Holder can immediately approve the data, and Certificates will issue within one day.

All energy efficiency projects (including demand side management for municipalities and electric membership corporations) are self-reporting and can submit the energy savings data once per year to issue Energy Efficiency Certificates. Such Electric Power Suppliers must retain for audit their work papers demonstrating their forecasted energy savings for each program that they operate, and the actual results of those programs, including data from measurement and verification reports filed with the Commission. A group of energy efficiency programs may be treated by an Electric Power Supplier or Utility Compliance Aggregator as one Project within NC-RETS, provided that the Electric Power Supplier or Utility Compliance Aggregator maintains thorough documentation explaining how the net savings (and resulting Energy Efficiency Certificates) were calculated.

Unless otherwise provided, each municipal utility or electric membership corporation (or their Utility Compliance Aggregator) that wants NC-RETS to issue Certificates for their Southeastern Power Administration (SEPA) allocations will need to create a Project in NC-RETS and self-report their monthly SEPA deliveries based on their invoice from SEPA.

#### STEP 5 – Annual Update of Renewable Energy Facility Registration

Per the Commission's rules, Renewable Energy Facilities must annually provide attestations in order to continue to earn Certificates eligible for compliance with the Portfolio Standard. Each March 1<sup>st</sup>, March 20<sup>th</sup>, April 1<sup>st</sup> and April 15<sup>th</sup> NC-RETS will send an automated notification reminder to Account Holders that have Projects assigned to them. These notifications will remind the Account Holder of the need to complete the on-line attestation form. The Account Holder will be asked to certify that the Renewable Energy Facility remains in substantial compliance with laws for protecting the environment, that the facility continues to be operated as a Renewable Energy Facility, that Certificates from the facility are not being remarketed and that the Account Holder agrees to the auditing of its books by the Public Staff and the Commission. The facility owner certifies on-line regarding these four statements and provides their name, title, company and



phone number. After April 1, the Account Holder will be forced to complete the attestation in order to continue using NC-RETS. If the Account Holder has not completed the attestation by April 15, NC-RETS will notify the Commission which will consider whether to revoke the Renewable Energy Facility's registration.

## **Appendix C: Documentation Requirements for Multi-fuel Generation Projects**

Upon registering a Multi-fuel Generation Project, the Account Holder must submit to the NC-RETS Administrator a report documenting the methodology it will use to calculate the energy production associated with each fuel used during a month. Following the NC-RETS Administrator's review and acceptance of such a report's methodology, the Account Holder may seek creation of Certificates.

Documentation of the following information used to calculate the proportion of energy output per Fuel Type generated by the Renewable Energy Facility during a billing period must be maintained by Multi-fuel Renewable Energy Facilities for 10 years or as otherwise required by Commission rule.

1. Quantities of each Fuel Type used must be documented and must be consistent with those reported to Balancing Authority(s), EPA or state air regulators, if applicable.
2. Documentation of net heat content for each Fuel Type (if applicable) must be supported by documentation.
3. Specification of a heat rate must be consistent with the heat rate reported to the Renewable Energy Facility's Balancing Authority, if applicable.

## Appendix D: NC-RETS Generator Fuel Types

<b>FUEL/PROJECT TYPE (SHORT DESCRIPTION)</b>	<b>FUEL/PROJECT TYPE(LONG DESCRIPTION)</b>	<b>RENEWABLE</b>
BAW	Biomass - Agricultural Solid Waste	Yes
BA3	Biomass - Animal Waste - Other Animal Waste, Solid or Gas	Yes
BA2	Biomass - Animal Waste - Poultry Waste, Solid or Gas	Yes
BA1	Biomass - Animal Waste - Swine Waste, Solid or Gas	Yes
BML	Biomass - Combustible Liquids - Other	Yes
BBL	Biomass - Combustible Liquids - Spent Pulping Liquors	Yes
BMC	Biomass - Energy Crop	Yes
BLF	Biomass - Landfill Methane	Yes
BMO	Biomass - Other Biomass, including Combustible Residues	Yes
BIM	Biomass - Other Combustible Gas	Yes
BWW	Biomass - Wood Waste	Yes
CO1	Coal	No
DI1	Diesel	No
GE1	Geothermal	Yes
HYD	Hydropower - Non-SEPA	Yes
H2O	Hydropower - SEPA	Yes
JET	Jet Fuel	No
MSW	Municipal Solid Waste - Non-Renewable	No
NG1	Natural Gas	No
OC1	Ocean/Wave/Current	Yes
OIL	Oil	No
OTH	Other non-renewable fuel	No
SO1	Solar - Photovoltaic	Yes
STH	Solar - Thermal	Yes
STU	Solar – Thermal Unmetered	Yes
TDF	Tire Derived Fuel – Renewable	Yes
TIR	Tire Derived Fuel – Not Renewable	No
WND	Wind	Yes



## **Appendix E: List of Referenced Documents**

NC-RETS Terms of Use  
NC-RETS Fee Schedule  
North Carolina Session Laws 2007-397  
Commission Rules R8-64 through 69

## Appendix F: Compatible Tracking Systems

<b>COMPATIBLE TRACKING SYSTEM</b>	<b>CAN EXPORT CERTIFICATES TO NC-RETS</b>	<b>CAN IMPORT CERTIFICATES FROM NC-RETS</b>	<b>WEBSITE</b>
North American Renewables Registry (NAR)	Yes	Yes	narenewables.apx.com
Midwest Renewable Energy Tracking System (M-RETS)	Yes	No	mrets.org
Western Renewable Energy Generation Information System (WREGIS)	Yes	No	wregis.org
Electric Reliability Council of Texas (ERCOT)	Yes. See Appendix G	No	texasrenewables.com
PJM GATS	No	No	Pjm-eis.com

**APPENDIX G: PROTOCOL FOR IMPORTS FROM ERCOT**

Step	Process	ERCOT Status	NC RETS
1	Seller will transfer RECs from their ERCOT account to <i>APX, Inc (for benefit of NC-RETS)</i> account.	Pending transfer	n/a
2	Seller will email NC-RETS admin the "Export Request Form" which includes the details below as well as agreement to release data to NC-RETS: 6) REC Quantity to be transferred 7) REC serial numbers 8) REC Vintage 9) Seller account name & ID# in ERCOT 10) Buyer account name & ID# in NC-RETS account ID	Pending transfer	n/a
3	4) APX will confirm that the details in the Export Request Form match the RECs that are pending transfer in the <i>APX, Inc (for benefit of NC-RETS)</i> account. 5) APX will confirm that the facility is approved by the NCUC. 6) APX will respond to the Seller in ERCOT that it is awaiting confirmation from the Buyer in NC-RETS or make the Seller in ERCOT aware of any issues found in 1-2 above.	Pending transfer	n/a
4	APX will email the Export Request Form from the Seller in ERCOT to the Buyer in NC-RETS to confirm transaction details	Pending transfer	n/a
5	Upon confirmation from the Buyer in NC-RETS, ERCOT REC transfer will be accepted in <i>APX, Inc (for benefit of NC-RETS)</i> account. and proceed to step 6 -or- Upon rejection by the buyer in NC-RETS, ERCOT REC transfer will be rejected by the <i>APX, Inc (for benefit of NC-RETS)</i> account. (No further steps needed)	Transfer Accepted – Certificates Active in APX-ERCOT account OR Transfer Rejected – Certificates Active in Seller's account in ERCOT	n/a
6	NC-RETS Admin creates Project Record in NC-RETS, if necessary <sup>12</sup> , and issues RECs in NC-RETS.	Certificates Active in the ERCOT APX, Inc. Account	Certificates Issued in APX's NC-RETS account
7	NC-RETS Admin transfers RECs to the buyer in NC-RETS	Certificates Active	Certificates Pending transfer

<sup>12</sup> If this is the first import of RECS from the facility, an import project will need to be created in NC-RETS. The projects are created once in the NC-RETS administrator account and stay there. After being created once, they do not need to be created for each future transaction.

8	Buyer in NC-RETS accepts transfer.	Certificates Active	Transfer Accepted
9	APX retires Certificates in ERCOT, <i>APX, Inc (for benefit of NC-RETS)</i> account with the following details: Export to NC RETS [Exporter] [Importer][Date]	Certificates Retired	Certificates Active in Buyer's NC-RETS account
10	APX confirms conclusion of import with both parties (REC Exporter and REC Importer). APX creates log entry in NC-RETS with REC details for the ERCOT RECs that were retired, paired with the NC-RETS RECs that were created.	Certificates Retired	Certificates Active

# **APPENDIX 2**

**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

DOCKET NO. E-7, SUB 939  
DOCKET NO. E-7, SUB 940

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-7, SUB 939	)	
	)	
In the Matter of	)	
Application of Duke Energy Carolinas, LLC,	)	
For Registration of Buck Steam Station,	)	ORDER ACCEPTING
Units 5 and 6, as New Renewable Energy	)	REGISTRATION OF
Facilities	)	RENEWABLE ENERGY
	)	FACILITIES
DOCKET NO. E-7, SUB 940	)	
	)	
In the Matter of	)	
Application of Duke Energy Carolinas, LLC,	)	
For Registration of Lee Steam Station, Units 1	)	
2 and 3, as New Renewable Energy Facilities	)	

HEARD:    Wednesday, July 14, 2010, at 9:30 a.m. and Thursday, July 15, 2010, at 9:00 a.m. in the Commission Hearing Room, Dobbs Building, 430 North Salisbury Street, Raleigh, North Carolina

BEFORE:    Commissioner ToNola D. Brown-Bland, Presiding; Chairman Edward S. Finley, Jr.; and Commissioners Lorinzo L. Joyner, William T. Culpepper, III, Bryan E. Beatty, Susan W. Rabon, and Lucy T. Allen

APPEARANCES:

    For Duke Energy Carolinas, LLC:

        Robert W. Kaylor, Law Office of Robert W. Kaylor, P.A., 3700 Glenwood Avenue, Suite 330, Raleigh, North Carolina 27612

        Charles A. Castle, Senior Counsel, Duke Energy Corporation, EC03T/Post Office Box 1006, Charlotte, North Carolina 28201-1006

    For Progress Energy Carolinas, Inc:

        Dwight W. Allen, Allen Law Offices, PLLC, 3737 Glenwood Avenue, Suite 100, Raleigh, North Carolina 27612

For North Carolina Farm Bureau Federation and North Carolina Forestry Association:

H. Julian Philpott, Jr., N.C. Farm Bureau Federation, Inc., Post Office Box 27766, Raleigh, North Carolina 27611

For GreenCo Solutions, Inc.:

Richard Feathers, North Carolina Electric Membership Corporation, Post Office Box 27306, Raleigh, North Carolina 27611

For North Carolina Sustainable Energy Association:

Kurt Olson, North Carolina Sustainable Energy Association, 1111 Haynes Street, Suite 111, Raleigh, North Carolina 27604

For Environmental Defense Fund and Southern Environmental Law Center:

Gudrun Thompson and Derb Carter, Southern Environmental Law Center, 200 West Franklin Street, Suite 330, Chapel Hill, North Carolina 27278

For MeadWestvaco Corporation:

Henry W. Jones, Jr., Jordan, Price, Wall, Gray, Jones & Carlton, PLLC, Post Office Box 10669, Raleigh, North Carolina 27605

For the Using and Consuming Public:

Robert S. Gillam, Staff Attorney, Public Staff – North Carolina Utilities Commission, 4326 Mail Service Center, Raleigh, North Carolina 27699-4326

Len Green, Assistant Attorney General, North Carolina Department of Justice, Post Office Box 629, Raleigh, North Carolina 27602-0629

BY THE COMMISSION: On March 1, 2010, Duke Energy Carolinas, LLC (Duke or Company), filed applications in the above-captioned dockets to register its Buck Steam Station Units 5 and 6 and Lee -Steam Station Units 1, 2, and 3 as new renewable energy facilities, pursuant to G.S. 62-133.8 and Commission Rule R8-66, for compliance with the North Carolina Renewable Energy and Energy Efficiency Portfolio Standards (REPS), enacted through Session Law 2007-397 (Senate Bill 3).

The Commission granted petitions to intervene filed by Environmental Defense Fund (EDF) and Southern Environmental Law Center (SELC) (collectively, Environmental Intervenors); North Carolina Sustainable Energy Association (NCSEA); Progress Energy Carolinas, Inc. (PEC); GreenCo Solutions, Inc. (GreenCo); North Carolina Municipal Power Agency No. 1 and North Carolina Eastern Municipal Power

Agency (collectively, Power Agencies); ElectriCities of North Carolina, Inc.; North Carolina Farm Bureau Federation (NCFB); North Carolina Forestry Association (NCFA); and MeadWestvaco Corporation (MWV). The intervention and participation of the Attorney General is recognized pursuant to G.S. 62-20; the intervention and participation of the Public Staff is recognized pursuant to G.S. 62-15(d) and Commission Rule R1-19(e).

On April 27, 2010, the Commission issued an Order consolidating these two dockets, scheduling an evidentiary hearing and oral argument, and establishing discovery guidelines.

On May 24, 2010, Duke filed the testimony of Owen A. Smith, Tracy L. Beer and Peter Stewart. On June 21, 2010, NCFB and NCFA filed the testimony of Robert W. Slocum, Jr. On June 25, 2010, EDF and SELC filed the testimony of Shawn Carraher and Carolyn Gilbert, and MWV filed the testimony of Kirby Funderburke. On July 8, 2010, MWV filed the amended direct testimony of Mr. Funderburke.

On July 8, 2010, EDF and SELC filed a motion to strike the testimony of Mr. Slocum, which motion was denied by the Presiding Commissioner at the hearing. On July 9, 2010, Duke filed the rebuttal testimony of witnesses Smith, Beer and Stewart.

The case came on for hearing as ordered on July 14, 2010. Duke presented the testimony and exhibits of witnesses Smith, Beer and Stewart. NCFB and NCFA presented the testimony of Mr. Slocum, EDF and SELC presented the testimony and exhibits of Mr. Carraher and Ms. Gilbert, and MWV presented the testimony and exhibits of Mr. Funderburke.

On September 14, 2010, Temple-Inland, Inc., and Georgia-Pacific, LLC, filed untimely petitions to intervene. On September 16, 2010, Duke filed an objection and opposition to the petitions to intervene, which petitions were denied by Order dated October 1, 2010.

Based upon the foregoing, the testimony and exhibits introduced at the hearing, and the entire record in this proceeding, the Commission now makes the following

#### FINDINGS OF FACT AND CONCLUSIONS OF LAW

1. Duke is a duly organized limited liability company existing under the laws of the State of North Carolina and is engaged in the business of developing, generating, transmitting, distributing, and selling electric power to the public in North Carolina, and is subject to the jurisdiction of the Commission as a public utility. Duke is lawfully before this Commission based upon its applications filed pursuant to G.S. 62-133.8 and Commission Rule R8-66 to register its Buck Steam Station (Buck) and Lee Steam Station (Lee) as new renewable energy facilities.

2. Lee is a thermal electric generating station located in Williamson, South Carolina, with a total maximum net dependable capacity (MNDC) of 370 megawatts (MW). Duke began a biomass co-firing production trial at Lee in July 2009, continuing through the end of 2009, to evaluate the use of wood as a fuel for energy production in combination with coal. This trial generated approximately 1,303 megawatt-hours (MWh) of energy attributable to the wood biomass fuel, which would result in the generation of 1,303 corresponding biomass renewable energy certificates (RECs). For the co-firing test burns, Duke blended coal with three-quarter inch sized wood chips to accommodate the requirements of the boilers at the facility.

3. Buck is a thermal electric generating station located in Salisbury, North Carolina, with a total MNDC of 369 MW. Duke conducted woody biomass co-firing test burns at Buck between August 17 and September 9, 2009. This test burn generated 2,254 MWh of energy attributable to the wood biomass fuel, which would result in the creation of 2,254 corresponding biomass RECs. At Buck, the coal was blended with both sawdust and one-half inch sized wood chips for the test burns, again to accommodate the operational specifications of the facility's boilers.

4. Duke plans to continue using Lee and Buck for evaluation of co-firing applications and as system resources utilizing wood biomass fuel in combination with coal. Duke has undertaken a comprehensive economic and operational analysis of brownfield biomass applications, with the Lee and Buck projects being part of the initial phases of a multi-phase, multi-year process. Duke intends to use a range of wood biomass fuel resources to supply its biomass operations, including wood waste materials like logging residues, sawdust and pre-commercial thinnings, and primary forest harvest materials like wood chips from whole trees.

5. Pursuant to G.S. 62-133.8(a)(7), a "renewable energy facility" means, in relevant part, a facility that generates electric power by use of a renewable energy resource. A "renewable energy resource," under G.S. 62-133.8(a)(8), means, among other things, "a biomass resource, including agricultural waste, animal waste, wood waste, spent pulping liquors, combustible residues, combustible liquids, combustible gases, energy crops, or landfill methane." The definition of "renewable energy resource" specifically excludes "peat, a fossil fuel, or nuclear energy resource."

6. "Biomass resource" is not otherwise defined in Senate Bill 3, nor is it defined in the Commission's rules interpreting Senate Bill 3. The Commission has, through the rulemaking process in Docket No. E-100, Sub 113, adopted an approach to assess whether certain proposed resources qualify as "biomass resources" on a case-by-case basis.

7. The list of resources following the words "biomass resource, including" in the definition of a "renewable energy resource" is a list of examples, not an exhaustive or exclusive list, based on the relevant case law and the specific exclusion elsewhere in the definition of other organic materials that otherwise might have been considered to be biomass resources.

8. Wood fuel derived from whole trees through primary harvests is an organic material that qualifies as a “biomass resource” and a “renewable energy resource” under G.S. 62-133.8(a)(8).

9. The registration statements for Buck and Lee meet the requirements of Commission Rule R8-66, and both facilities qualify as “renewable energy facilities” pursuant to G.S. 62-133.8(a)(7).

10. Duke may earn RECs for the renewable energy produced at Buck and Lee using renewable energy resources to meet its annual REPS obligations pursuant to G.S. 62-133.8(b)(2)(b).

#### EVIDENCE FOR FINDING OF FACT AND CONCLUSION OF LAW NO.1

This finding of fact and conclusion of law is essentially informational, jurisdictional, and procedural in nature and is not controversial.

#### EVIDENCE FOR FINDINGS OF FACT AND CONCLUSIONS OF LAW NOS. 2 - 4

The evidence supporting these findings of fact and conclusions of law appears in the registration statements for Buck and Lee and the direct and rebuttal testimony of Duke witnesses Smith and Beer.

On March 1, 2010, Duke filed registration statements for Buck and Lee seeking to register the facilities as new renewable energy facilities pursuant to Commission Rule R8-66 and to allow Duke to earn RECs associated with the renewable energy generation at the facilities to comply with its REPS obligation.

Duke witness Beer explained that Lee is a thermal electric generating station located in Williamson, South Carolina, with an MNDC of 370 MW. She stated that Duke began a biomass co-firing production trial at Lee in July 2009, continuing through the end of 2009, to evaluate the use of wood as a fuel for energy production in combination with coal. The trial at Lee generated approximately 1,303 MWh of energy attributable to the wood biomass fuel, which would result in the creation of 1,303 corresponding biomass RECs. According to Ms. Beer, for the co-firing test burns, Duke blended coal with three-quarter inch sized wood chips to accommodate the requirements of the boilers at the facility. Ms. Beer further testified that the wood fuel used for the test burns at Lee was sourced from a local external forestry services vendor who produced the material using standard in-woods chipping processes and equipment consistent with typical forestry practices. Ms. Beer stated that Duke could not characterize the wood fuel used at Lee as “wood waste” material because the chips could have contained both residual materials, as well as primary harvest material derived from whole trees.

Witness Beer further testified that Buck is a thermal electric generating station located in Salisbury, North Carolina, with a total MNDC of 369 MW. She stated that Duke conducted woody biomass co-firing test burns at Buck between August 17 and

September 9, 2009, generating 2,254 MWh of energy attributable to the wood biomass fuel, which would result in the creation of 2,254 corresponding biomass RECs. At Buck, the coal was blended with both sawdust and one-half inch sized wood chips for the test burns, again to accommodate the operational specifications of the facility's boilers. Ms. Beer further testified that, for the test burns at Buck, Duke sourced the sawdust from an aggregator who obtained the material from local sawmills. The wood chips were derived from trees harvested during an on-site ash basin land clearing project, which was planned prior to, and was unrelated to, the biomass co-firing test. The fuel was chipped on-site to meet the specifications for the facility. Ms. Beer characterized the wood used for the Buck test burn as "wood waste," stating that it likely would have been burned on-site, transported to the landfill for disposal, or possibly sold into the market had it not been used for the biomass test burn.

Witness Beer explained that Duke intends to build upon the operational experience gained from the 2009 biomass runs and further develop the biomass fuel supply procurement related to short and long-term REPS compliance. She testified that Duke's biomass implementation strategy is a multi-year effort that, at full implementation and build-out, will include Duke-owned "brownfield" biomass projects expected to produce over 1 million RECs annually, and described the comprehensive economic analysis undertaken with respect to the implementation of Duke's biomass strategy. Ms. Beer testified that Buck and Lee represent the initial phase of this strategy, and explained further that the objective for the phased approach is to demonstrate proof of concept in a manner that mitigates operational and capital risk as, over time, the strategy moves from more transitory projects towards more permanent, higher capital projects. She elaborated that, through this process, Duke has evaluated the existing spectrum of biomass technologies, including gasification, as options for co-firing and/or repowering in all its coal-fired generation units as part of the first phase of its biomass co-firing assessment.

To support its biomass strategy, Duke intends to use those cost-effective wood fuels qualifying as "biomass resources" under Senate Bill 3. Also, according to Ms. Beer, Duke fully intends to utilize those lower value products, like "wood waste," first, and only move to other fuel resources to the extent those lower cost products are unavailable. Witness Beer further testified that in December 2009, Duke issued a request for information for biomass fuel supplies and received 26 responses for a variety of biomass resources. She explained that the predominant biomass fuel that was offered was derived from whole tree chips and that only one proposal was for solely "wood waste" or logging residue materials. Ms. Beer acknowledged, however, that as a matter of prudence and out of an abundance of caution given the uncertainty arising out of the proceedings in this docket, the wood fuel procured for the test burns and production runs in 2010 will all generally fall into the category of "wood waste."

#### EVIDENCE FOR FINDINGS OF FACT AND CONCLUSIONS OF LAW NOS. 5 - 8

The evidence supporting these findings of fact and conclusions of law appears in the testimony of Duke witnesses Smith, Beer and Stewart; Environmental Intervenor

witnesses Carraher and Gilbert; NCFB and NCFA witness Slocum; and MWV witness Funderburke.

Pursuant to G.S. 62-133.8(a)(7), a “renewable energy facility” means, among other things, a facility that “generates electric power by use of a renewable energy resource.” G.S. 62-133.8(a)(8) specifically provides that a “renewable energy resource” means:

a solar electric, solar thermal, wind, hydropower, geothermal, or ocean current or wave energy resource; a biomass resource, including agricultural 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 resource. [Emphasis added.]

Neither the statute nor the Commission’s rules implementing Senate Bill 3 otherwise defines “biomass resource.” As part of the rulemaking process to implement Senate Bill 3, an intervening party requested that the Commission include a more specific definition of “biomass resource” within its rules to clarify the definition of this term. The Commission declined to do so in that proceeding, seeking to avoid narrowly construing the term in a way that could limit the definition of “biomass resource,” and intending to rely upon its discretion to make case-by-case determinations based on the record in individual cases. In the Commission’s February 29, 2008 Order Approving Final Rules, in Docket No. E-100, Sub 113, it concluded that:

a determination of whether a resource used by a particular facility is a “renewable energy resource,” ... should be made on a case-by-case basis with an adequate opportunity for the Public Staff or other interested persons to challenge asserted facts. The registration process established in Rule R8-66 permits such a determination to be made on the basis of an appropriate record with regard to a particular facility.... Therefore, rather than potentially limit the definition of “biomass” on the basis of an incomplete record in this rulemaking proceeding, the Commission concludes that the statutory definition of “renewable energy resource” is sufficient and that “biomass” should not be separately defined in Rule R8-67.

Duke argues that the Commission, guided by case law, must apply rules of statutory construction to interpret the term “biomass resource” consistent with the intent of the General Assembly and then apply that interpretation to the facts and circumstances of this particular case. Under North Carolina law, notes Duke, the cardinal principle of the canons of statutory construction is to ensure accomplishment of the legislative intent of the subject statute. See L. C. Williams Oil Co. v. NAFCO Capital Corp., 130 N.C. App. 286, 289, (1998). To that end, one must consider “the language of

the statute ..., the spirit of the act and what the act seeks to accomplish.” Coastal Ready-Mix Concrete Co. v. Board of Comm’rs, 299 N.C. 620, 629 (1980). Undefined words are accorded their plain meaning so long as it is reasonable to do so, see Woodson v. Rowland, 329 N.C. 330, 338 (1991), and the reviewing body must evaluate the statute as a whole and must not construe an individual section in a manner that renders another provision of the same statute meaningless. See Williams v. Holsclaw, 128 N.C. App. 205, 212, aff’d, 349 N.C. 225 (1998).

In G.S. 62-133.8(a)(8), the General Assembly chose to add a list of qualifying resources, preceded by the word “including,” after the reference to “biomass resource” in the definition of “renewable energy resource.” In its brief, Duke argues that, based upon generally accepted norms of statutory construction, where a list is preceded by the word “includes,” which is generally a term of enlargement rather than limitation, N.C. Turnpike Authority v. Pine Island, Inc., 265 N.C. 109, 120 (1965) (quoting People v. Western Air Lines, Inc., 42 Cal. 2d 621, 639, 268 P.2d 723, appeal dismissed sub nom. Western Airlines, Inc. v. California, 348 U.S. 859, 75 S.Ct. 87, 99 L.Ed. 677 (1954)), it indicates that matters other than those enumerated can be a part of the subject group. See Norman J. Singer, 2A Sutherland on Statutory Construction 231-232 (2000). Moreover, Duke asserts that, according to A Dictionary of Modern Legal Usage, “including should not be used to introduce an exhaustive list, for it implies that the list is only partial.” Duke similarly cites Merriam-Webster Dictionary, which defines the term “including” as meaning “to take in or comprise as part of a whole or group.” Thus, to “include” one thing does not implicitly “exclude” another due to the plain fact that “including” one or more items in the specified whole or group simply means, pursuant to this definition, that those specified items are merely part of that whole or group. As such, according to Duke, adding “but not limited to” or “without limitation” after “including” does not change the meaning of term. Duke further states that, as stated in Sutherland on Statutory Construction, “it is hornbook law that the use of the word ‘including’ indicates that the specified list ... that follows is illustrative, not exclusive.” Certified Color Mfg. Ass’n v. Mathews, 543 F.2d 284, 296 (D.C.Cir. 1976).

Duke further argues that the North Carolina Supreme Court adopted this rule of statutory construction in Turnpike Authority, quoting the West Virginia Supreme Court’s analysis on the construction of the term “including”:

Clearly, by use of the word ‘including’ the lawmakers intended merely to list examples ..., but not to exclude others equally well known. Had the latter been their intention, the proper expression to have been used would have been ‘comprising,’ ‘consisting of,’ or some synonymous term. This is not a situation which calls for the application of the maxim, ‘expressio unius est exclusio alterius.’

See also Polaroid Corp. v. Offerman, 349 N.C. 290, 301 (1998) (“includes” indicates the General Assembly’s intention to enlarge, not limit, a statutory definition). Duke argues that the Commission has adopted this interpretation of “including” in the context of the definition of “biomass resource”, as it specifically noted in the February 24, 2010 Order

on Request for Declaratory Ruling, in Docket No. SP-100, Sub 25, that “the definition of ‘renewable energy resource’ in G.S. 62-133.8(a)(8) includes ‘biomass resource,’ listing several examples without limitation.” (Emphasis added.)

Duke specifically asserts that “biomass”, as defined by the federal Biomass Research and Development Technical Advisory Committee,<sup>1</sup> means “any organic matter that is available on a renewable or recurring basis, including agricultural crops and trees, wood and wood wastes and residues, plants (including aquatic plants), grasses, residues, fibers, animal wastes, and segregated municipal waste ....” (Emphasis added.) Duke notes that the North Carolina Biomass Council, the North Carolina State Energy Office, and the North Carolina Solar Center have adopted and incorporated this definition into the North Carolina Biomass Roadmap. Duke points out that the Commission has also used this definition in its evaluation of requests for declaratory rulings and decisions to approve registration statements for facilities using “biomass” fuels that were not included in the explicit statutory list within G.S. 62-133.8(a)(8). For example, the Commission has ruled that biosolids<sup>2</sup> (the organic material remaining after treatment of domestic sewage), refuse-derived fuel,<sup>3</sup> and tire-derived fuel<sup>4</sup> (to the extent of the naturally occurring rubber) are all “renewable energy resources” and eligible to earn RECs for REPS purposes. Duke argues that wood, in its various forms and iterations through its life-cycle, is undoubtedly “biomass” under this generally accepted definition of the term. If one reduces the definition to its component elements, then it is apparent that wood qualifies as a “biomass resource.” First, wood is organic plant material; second, wood is available on a renewable and recurring basis in the forests of this State and country. Thus, according to Duke, to effectuate the intent of the General Assembly that “biomass resources” qualify as “renewable energy resources” for REPS compliance purposes, wood must be considered a “renewable energy resource” under the law. Duke contends that there is no dispute as to whether wood constitutes an organic plant material, but there remains a dispute as to whether it is available on a renewable and recurring basis. It further contends that trees, as plant material, are inherently renewable and recurring. Duke emphasized that trees will regrow through natural germination processes in the absence of affirmative replanting or other cultivation intervention.

Duke further argues that a limiting interpretation of “biomass resource” will result in practical impacts that contravene the basic purposes of Senate Bill 3. Witness Smith testified that wood-fired biomass represents the renewable resource with the most readily achievable, scalable development potential within North Carolina, but that potential would be marginalized if Duke could only use “wood waste” as fuel due to the

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<sup>1</sup> The Biomass Research and Development Technical Advisory Committee is a multi-agency federal initiative supported by the U.S. Department of Agriculture and U.S. Department of Energy to coordinate and accelerate Federal biobased products and bioenergy research and development.

<sup>2</sup> Order on Request for Declaratory Ruling, Docket No. SP-100, Sub 25 (February 24, 2010).

<sup>3</sup> Order on Request for Declaratory Ruling, Docket No. SP-100, Sub 23 (March 25, 2009).

<sup>4</sup> Order Issuing Amended Certificates, Accepting Registration Statement and Issuing Declaratory Ruling, Docket No. SP-165, Sub 3 (December 17, 2009).

lack of adequate supply of such fuel in the marketplace to meet its needs. Specifically, both witnesses Smith and Beer stated that, if only “wood waste” qualifies as a “biomass resource,” Duke will not likely pursue its biomass strategy to full implementation.

Duke witness Stewart, with Forest2Market, Inc., defines “wood waste” as limbs, tops, harvest slash and residues, pre-commercial thinnings and other byproducts or residual wood resulting from forest management activities, otherwise known as “forest residues.” Mr. Stewart testified that, due to the lack of a market for the product, only 6% of in-woods forest residues are currently collected within Duke’s potential procurement area, defined as Duke’s service territory and those areas outside the service territory that are within an economic haul distance to its generating facilities. Based on data from Forest2Market’s transactional database that tracks approximately 80% of all timber transactions in the southern United States, only 2% of the total harvest in North Carolina, or approximately 305,918 tons, came from forest residue materials in 2009. Projecting forward, Mr. Stewart estimated that Duke could expect approximately 275,000 tons of “wood waste” or forest residue material annually. Mr. Stewart testified that this amount of fuel will not support Duke’s fuel needs for its planned co-firing and repowering generation projects. Witness Stewart’s testimony was consistent with witness Beer’s statement that, based on this fuel supply assessment, if Duke was limited to using “wood waste” materials, the projected annual REC production from its biomass operations would drop from over 1 million RECs to approximately 220,000 RECs.

Witness Stewart also testified that the eligibility of all harvested wood as a “biomass resource” under Senate Bill 3 should not result in direct competition between bioenergy facilities and the softwood lumber and plywood industries due to the simple issue of cost. Mr. Stewart acknowledged that the pulpwood market would experience some competition between energy companies and pulp and paper companies as a result of increased demand, but also stated that, given the restrictions of the cost caps, Duke would likely not have the appetite for higher cost wood products.

Duke witness Smith testified that a limitation on eligible wood biomass fuel to only “wood waste” would impact the cost of the qualifying fuel resources, thereby reducing the cost-effectiveness of wood-fired biomass, limiting the potential for large-scale development, and requiring the consideration of less cost-competitive resources. Due to the practical realities of the development path of renewable resources to date within North Carolina, Mr. Smith detailed that alternative options are limited. Witness Smith explained that, at present, landfill gas represents the most cost effective, in-state REPS-eligible resource available in the marketplace; however, there are only so many landfills, and, therefore, the potential for development of that resource is effectively capped. He elaborated that wind resource development in North Carolina is inherently limited by the natural wind conditions of the State as well as by specific legal, operational, and cost constraints in the mountains and on the coast. Finally, although solar generation exists as a scalable renewable resource option, Mr. Smith stated that it is simply not cost-competitive with wood biomass and would likely be constrained by a lack of availability of suitable land that would be needed to support the farms and arrays

necessary to attempt to match the capacity and output of a handful of biomass generation facilities.

By considering less cost-competitive resources out of necessity, witness Smith stated that Duke's incremental REPS costs of compliance would increase, likely significantly, because there is not a ready substitute for wood-fired biomass in terms of actual megawatt-hour energy output due to its baseload comparable capacity factors. Witness Smith explained that, as incremental costs of compliance increase, the number of RECs Duke can procure for compliance under the statutory cost caps are reduced. Mr. Smith noted that, although the cost caps may provide an off-ramp for REPS compliance purposes, the invocation of the cost cap off-ramp for REPS does not in any way reduce overall system-wide demand for energy. As such, for every megawatt-hour of renewable energy that is not procured for REPS compliance due to the invocation of the cost caps, Duke must generate or procure a corresponding megawatt-hour of non-incremental, likely non-renewable, energy from its other system resources to meet demand. In this way, the elimination of a large-scale, cost-effective renewable option, like wood biomass, will only lead to continued use of fossil generation by Duke to provide energy that could otherwise be delivered from a renewable resource.

Duke witness Beer also testified that to assure sustainability in fuel supply, such that the wood biomass fuel would be available on a renewable and recurring basis, Duke has specifically sized (in terms of capacity) its proposed biomass projects and specifically modeled its fuel supply requirements for those proposed projects based upon specific parameters. In the context of the evaluation of a potential repowering project as part of its biomass implementation strategy, Ms. Beer explained that Duke commissioned a fuel supply forecast for the life of the repowered asset, which applied specific constraints related to the volume of material and associated pricing that could be sustainably supplied while maintaining 2008 harvest levels of existing users and without impacting the economic viability of any existing user of forest resources within the relevant supply shed. Witness Beer testified that Duke's intentional constraints on its fuel supply forecast in this manner provided an explicit sustainability function from both an economic and environmental perspective as both existing uses and previous harvest levels acted as clear limits on fuel supply procurement for the project.

Ms. Beer stated that as an end-user of forest resources in North Carolina, Duke will also support the sustainability of forest resources by paying the assessment on primary forest products that is remitted to the State for inclusion in the North Carolina Forest Development Program (FDP), as required by the Forest Development Act and the Primary Forest Product Assessment Act. As referenced by NCFB and NCFA witness Slocum, the FDP is a reforestation cost-sharing program through which a landowner is reimbursed for a portion of the costs of site preparation, seedling purchases, tree planting, release of desirable seedlings from competing vegetation, or any other work needed to establish a new forest on his or her land after harvesting.

Ms. Beer also reiterated that when Duke issued its request for information for biomass fuels supply in December 2009, respondents were asked to provide detailed

descriptions of industry certifications, best management practices, and sustainability plans related to their fuel sourcing. She emphasized that the specifications regarding annual delivery requirements of 100,000 tons also sent a specific market signal to loggers, foresters, and landowners that a continuous, recurring demand for woody biomass fuel is present within the area, which was intended to incentivize sustainable practices on the part of the suppliers to ensure that they can actually compete to meet that demand on an ongoing basis.

Duke witness Smith also emphasized that the manner in which Duke has chosen project sites and project sizes has been guided carefully by the Company's conservative assessment of the quantity and nature of biomass fuels that can be procured in a sustainable manner over a long planning horizon within proximity to the sites in question. Mr. Smith further stated that the interests of Duke and its customers would not be served by investing in co-firing or repowering projects in locations where the procurement of biomass fuel could not be done in a reliable, sustainable, and cost effective manner. However, Duke has not self-regulated in this regard and placed specific sustainability requirements on its vendors because in the absence of statutory or regulatory requirements mandating such provisions, any incremental costs in the price of fuel due to such self-regulation may not be considered prudent under the circumstances. Mr. Smith testified that Duke believes that the careful evaluation of project locations and sizes is completely responsive to any questions of sustainability that may exist, and furthermore believes that such diligence is expected by the Commission in its normal expectations of prudent and reasonable decision-making on the part of a utility such as Duke.

In their brief, the Environmental Intervenors contend that, based on a plain reading of Senate Bill 3, the only renewable woody biomass resources that are intended to be "renewable energy resources" are "wood waste" materials. They assert that, by choosing to list the term "wood waste" following the general definition instead of "wood" or "wood chips" or "whole trees," the General Assembly specifically limited the type of wood that constitutes a "biomass resource" and a "renewable energy resource" under Senate Bill 3.

The Environmental Intervenors further argue that the legislative history of Senate Bill 3 supports their interpretation that "biomass resource" was intended to include only "wood waste" as an eligible wood product. They included as exhibits to their brief prior draft legislation from the 2005 legislative session: a letter dated February 23, 2006, from George Givens, Commission Counsel to the Environmental Review Commission, to Jo Anne Sanford, Chair of the Commission; the Agenda for the January 24, 2006 Meeting of the Environmental Review Commission; the Request for Proposals for Consulting Services on a Renewable Energy Portfolio Standards, dated May 12, 2006; the Minutes from the December 13, 2006, Meeting of the Environmental Review Commission; and an e-mail from George Givens, dated February 14, 2007, to a list of stakeholder participants for a meeting of the Energy Issues Working Group. The Environmental Intervenors argue that these documents provide evidence of the specific

legislative intent to exclude all wood resources, other than “wood waste,” from the definition of “biomass resources” under Senate Bill 3.

The Environmental Intervenors further cite the resource definition for eligible woody biomass within the voluntary NC GreenPower program, which was adopted for use in the LaCapra Study. They argue that this definition does not include any wood resources other than “wood waste,” and that, since the limited scope of eligible woody biomass under the NC GreenPower voluntary program and the LaCapra Study was squarely before the legislature at the time that Senate Bill 3 was passed, only those materials eligible for such program could possibly have been considered by the General Assembly. The Environmental Intervenors conclude that Senate Bill 3 involved a collaborative process and revisions were made to the legislation to add certain resources to the illustrative list after “biomass resources.” Thus, the fact that the ultimate session law only lists “wood waste” after “biomass resource” is dispositive with respect to the General Assembly’s intent with respect to qualifying wood resources.

Environmental Intervenor witnesses Carraher and Gilbert testified that Duke witness Stewart’s assessment of actual potential fuel supply from “wood waste” is overly conservative and that the practical impact of using only “wood waste” as fuel is overstated. They stated that Mr. Stewart’s estimates for annual fuel supply from forest residues are approximately 80% lower than the next closest estimate from the independent studies that they reviewed and that he artificially constrained the procurement area for his analysis by limiting the analysis to Duke’s service territory and the area within an economic haul distance from its facilities. Lastly, witnesses Carraher and Gilbert assert that Duke has failed to provide an economic analysis and comparison of the costs to use whole trees as fuel versus the costs of “wood waste” materials at Buck and Lee, and that the registration statements should be denied until that analysis is performed.

In its pre-hearing brief, MWV took a position identical to that of the Environmental Intervenors, that “biomass resource” should be limited to the list explicitly provided in the statute. MWV witness Funderburke asserted that Duke’s interpretation of “biomass resource” to include wood products other than “wood waste” directly contradicts other State and federal laws regarding renewable resources. Mr. Funderburke stated that using wood products other than “wood waste” is not in the public interest because of the negative impacts on traditional wood-using industries arising from the additional demand. He further argued that using wood for bioenergy applications is not the best use for merchantable wood in North Carolina, and such use will eliminate value from the wood supply chain, thereby damaging wood-using industries and the local economy. Mr. Funderburke also stated that Duke is not truly constrained by the cost caps when it comes to biomass fuel procurement, as Duke may recover a portion of its fuel costs through its fuel adjustment clause, thereby giving it extra headroom to pay higher prices for wood and outspend existing wood-using competitors.

In its post-hearing brief, MWV argued that the Commission should adopt the following definition of “wood waste”:

Wood waste is a woody material that does not currently have an existing market. It is the lowest wood resource in the value chain of wood. An existing market means there is a user currently willing to purchase the material including the cost of harvesting and transporting the material to a user's facility. Wood waste would generally include precommercial thinnings (including stands in areas with no markets for small diameter wood), logging debris from commercial harvests (limbs, tops, bark), very small diameter trees (less than 4 inches diameter breast height (DBH)) and other non-merchantable trees in clearcuts, and municipal woody organic waste material such as construction debris.

This definition includes whole trees for which there is no market, including "stands in areas with no markets for small diameter wood" and trees "less than 4 inches diameter breast height." MWV argues that it would not be inconsistent or otherwise inappropriate for the Commission to approve Duke's registration applications by modifying its use of "whole tree chips" to those trees which fall within the above definition of "wood waste."

In its brief, NCSEA agrees with the Environmental Intervenors that "renewable energy resource" does not include whole trees or wood derived from whole trees. NCSEA argues, however, "that whole trees or wood chips from whole trees can be a qualifying biomass and a renewable energy resource where the material is a secondary material or a primary material cultivated or collected for the purpose of energy recovery using sustainable practices." (Emphasis in original.) NCSEA, in analyzing the statute, argues that

the definition of renewable energy resource shows that a biomass qualifies as a "renewable energy resource" when beyond being biomass, it is a secondary material (e.g., "agricultural waste, animal waste, wood waste, spent pulping liquor, combustible residues"), or primary material (the direct, intended output of an activity) cultivated, grown or collected specifically for energy recovery, e.g., combustible liquids, combustible gases, energy crops or landfill methane.

Thus, NCSEA would allow Duke to earn RECs from its use of whole trees at Buck, but argues that insufficient information is available for the material used at Lee.

The Public Staff, NCFB and NCFA contend, in agreement with Duke and PEC, that wood other than "wood waste" qualifies as "biomass" based on the plain meaning of the definition of "biomass" itself. In their pre-hearing brief, NCFB and NCFA state that the Merriam Webster Online Dictionary (2010) defines "biomass" simply as "plant material or animal waste used especially as a source of fuel." Public Staff cites a separate definition from the American Heritage College Dictionary (3rd ed. 1997) where "biomass" is defined as "plant material, vegetation or animal waste used as an energy source." Public Staff also cites the definition from the North Carolina Biomass Roadmap, and asserts that under either definition, all sources of wood material cannot reasonably be defined as anything other than "biomass." In its letter filed after the

hearing, the Public Staff states that it supports Duke's position that all forms of wood constitute "biomass" within the meaning of G.S. 62-133.8(a)(8), and argues that the Commission should accept the registration of Duke's Buck and Lee units as renewable energy facilities.

NCFB and NCFA witness Slocum, a licensed forester, agreed with Duke's assertion that trees will naturally regrow, and testified that a harvested forest stand will regenerate naturally without any intervention unless the stand is paved over. Mr. Slocum further testified that the best avenue through which to keep North Carolina land in forestry is to provide robust, healthy markets for wood products, and that new demand for wood products relating to bioenergy fuel supply provides an additional market for wood products. Mr. Slocum also explained that specific State and federal cost share and tax benefit programs exist to support forest development, including the North Carolina FDP, the federal Present Use Value Tax Program, and certain provisions of the Farm Bill. Witness Slocum also stated that timber harvesting is regulated through various federal environmental protection laws, primarily relating to water quality and related impacts. Mr. Slocum also testified that current conditions indicate that timber products are being sustainably managed as the total acreage in forestland, net timber growth per acre, and timber inventories for hardwood and softwood increased in North Carolina between 2002 and 2007, thus supporting the conclusion that productive forestland in North Carolina is actually increasing.

After careful consideration, the Commission agrees with Duke, the Public Staff and others and finds and concludes that primary harvest wood products, including wood chips from whole trees, are "biomass resources" and "renewable energy resources" under G.S. 62-133.8(a)(8). The language of the statute demonstrates that the General Assembly did not intend to limit the scope of biomass resources qualifying as renewable energy resources to those resources specifically listed within the statute. "Biomass" is a broad category of resources and one that this Commission recognizes could be the source for a significant portion of the energy and RECs that the electric power suppliers use to comply with the REPS requirements.

The intent of the General Assembly further appears clear from a review of the definition of "renewable energy resource" as a whole. In the last sentence of the definition, the General Assembly explicitly provided that peat, a form of biomass, was excluded from the definition of "renewable energy resource." This explicit exclusion would have been unnecessary had the General Assembly intended to limit the definition of "biomass resource" to the items listed after the word "including" because peat is not either "agricultural waste, animal waste, wood waste, spent pulping liquors, combustible residues, combustible liquids, combustible gases, energy crops, or landfill methane." Thus, reading the statute as a whole, it is reasonable to conclude that the General Assembly did not intend to limit the development of "biomass resources" only to those listed in the definition of "renewable energy resource."

Moreover, the legislative history documents referenced by the Environmental Intervenors do not reflect a decision to affirmatively include only "wood waste" in the

definition of “biomass resource” or to exclude all other wood resources from that definition. The Environmental Intervenors’ position regarding the legislative history relies upon inference and ignores the clear language of the statute, primarily the use of the word “including” in advance of the list that follows the term “biomass resource.” With respect to the Environmental Intervenors’ references to the eligibility definitions in the NC GreenPower program and within the LaCapra Study, there is no reference within Senate Bill 3 to that definition, nor any specific indication within the law that those definitions were of any particular import to the General Assembly’s ultimate decisions with respect to the resources that would qualify as either “renewable energy resources” or, more specifically, “biomass resources”. To the extent that those definitions were even specifically considered by the General Assembly, they were not adopted as part of Senate Bill 3, and the applicability of any limitations within the NC GreenPower or LaCapra Study resource definitions cannot be imputed to the intent of the General Assembly.

Additionally, the Commission is encouraged by the steps Duke has taken to ensure that its fuel procurement will be accomplished in an economically and environmentally sustainable manner, such that the fuel that it procures will be available on “renewable and recurring” basis. Duke witnesses testified that it has strategically sized its operations to reduce impacts on existing users of wood products within its procurement area, sent explicit demand signals to vendors regarding its required annual demand and acceptable practices and explored strategic opportunities to invest in energy crops and trees to provide portions of the fuel supply necessary to run its operations. Taken collectively, Duke’s actions appear to represent a reasonable plan to ensure sustainable fuel supplies for its planned facilities and to mitigate any impacts on existing users within its procurement area. Further, the Commission encourages Duke to continue to maintain and adhere to reasonable, sustainable plans and practices as they relate to the procurement of wood products for fuel supply.

#### EVIDENCE FOR FINDINGS OF FACT AND CONCLUSIONS OF LAW NOS. 9 - 10

The evidence supporting these findings of fact and conclusions of law appears in the registration statements for Buck and Lee and the testimony of Duke witness Beer.

“Renewable energy facility” is defined, in relevant part, as “a facility, other than a hydroelectric power facility with a generation capacity of more than 10 megawatts, that ... [g]enerates electric power by the use of a renewable energy resource.” “New renewable energy facility” is defined, in relevant part, as “a renewable energy facility that ... [w]as placed into service on or after January 1, 2007.” Duke requested that Buck and Lee be registered as new renewable energy facilities.

The Commission notes that it is not necessary for Buck and Lee to be registered as renewable energy facilities or as new renewable energy facilities in order for Duke to apply the energy produced by co-firing toward meeting its REPS requirements. Duke may meet its REPS requirements by using “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.” G.S. 62-133.8(b)(2)(b). Nevertheless, these facilities meet the definition of renewable energy facility. Neither facility, however, was placed into service after January 1, 2007; rather, Duke witness Beer testified that Buck and Lee were placed into service in the 1950s. Moreover, neither facility required extensive modifications to allow it to burn biomass, as was the case with Coastal Carolina Clean Power in Docket No. SP-161, Sub 1. In fact, in her direct testimony, Duke witness Beer stated that the air permit for Lee already allows Duke to burn certain wood products as an alternative fuel. She further testified on cross-examination that co-firing tests had been undertaken at Lee much earlier than 2007, stating:

That project [Lee] utilized existing infrastructure from the mid 1990s when the Company [Duke] initially co-fired biomass. And we resurrected it, added a little more money to it, and have been burning biomass ever since. The reason that we went there first was because we had that existing infrastructure and were able to test this material in a very low capital way.

Furthermore, in its June 17, 2009 Order on Motion for Clarification in Docket No. E-100, Sub 113, the Commission concluded that, with regard to small hydroelectric generating units, “individual generating units that are components of a larger hydroelectric generating plant are not individual renewable energy facilities.” Rather, the term “facility” refers to the entire generating plant. Similarly, here, no evidence has been provided that the individual units at Buck and Lee should be individually registered as renewable energy facilities rather than the entire Buck and Lee Steam Stations. In its proposed order, Duke refers to Buck and Lee as two facilities consistent with this conclusion.

On March 8, 2010, and March 12, 2010, respectively, the Public Staff filed the recommendations required by Rule R8-66(e) stating that Duke’s registration statements for Buck and Lee should be considered to be complete.

Therefore, having concluded that wood biomass qualifies as a “biomass resource”, and thus a “renewable energy resource”, under G.S. 62-133.8(a)(8), the Commission concludes further that Lee and Buck qualify as, and should be registered as, “renewable energy facilities” pursuant to G.S. 62-133.8(a)(7) and Commission Rule R8-66. Finally, the Commission concludes that Duke may earn RECs for the renewable energy produced at Buck and Lee using renewable energy resources to meet its annual REPS obligations pursuant to G.S. 62-133.8(b)(2)(b).

IT IS, THEREFORE, ORDERED as follows:

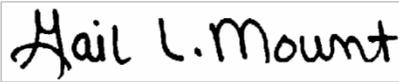
1. That the registration by Duke for Buck and Lee as renewable energy facilities shall be, and hereby is, accepted; and

2. That Duke shall annually file the information required by Commission Rule R8-66 for Buck and Lee by April 1 of each year.

ISSUED BY ORDER OF THE COMMISSION.

This the 11<sup>th</sup> day of October, 2010.

NORTH CAROLINA UTILITIES COMMISSION

A rectangular box containing a handwritten signature in black ink that reads "Gail L. Mount".

Gail L. Mount, Deputy Clerk

Commissioner William T. Culpepper, III, dissents, in part.

Sw101110.02

**DOCKET NO. E-7, SUB 939**  
**DOCKET NO. E-7, SUB 940**

**Commissioner William T. Culpepper, III, dissenting in part:**

I respectfully dissent from that portion of this Order Accepting Registration of Renewable Energy Facilities that finds and concludes that primary harvest wood products, including wood chips from whole trees, are “biomass resources” and “renewable energy resources” under G.S. 62-133.8(a)(8).

The issue of whether or not the use of whole trees harvested for the purpose of electricity generation is allowable for renewable energy portfolio standard compliance purposes has been “on the table” ever since the enactment of Senate Bill 3.

In its March 2010 Report and Recommendations Concerning Forest Resource Impacts of the Woody Biomass Industry in North Carolina (March 2010 Report), the North Carolina Environmental Management Commission (EMC) stated its finding that “[t]he differing interpretations of the statutory definition of ‘renewable energy resource’ as applicable to ‘biomass’ result in uncertainty and confusion as to the types of biomass resources eligible under the Renewable Energy Portfolio Standard ...”, and concluded that “[t]he General Assembly should clarify the definition of ‘renewable energy resource’ in relation to woody biomass.”<sup>1</sup>

On page 10 of the March 2010 Report, the EMC writes:

As written the definition of renewable energy resource allows for a range of interpretations as to what the legislature intended to include as a biomass resource. ...

One view of this definition is that it is intended to encompass all woody biomass resources and is not restricted to wood waste. The acceptance of this interpretation in its most basic form would allow the use of any type of woody biomass resource to meet the mandates of Senate Bill 3, including the harvesting and burning of whole trees. ...

Another view of the definition is that it is intended to be narrowly read and restricts biomass resources to wood waste. Supporters of this position contend that the listing of biomass sources in the definition is done for limiting purposes, rather than illustrative purposes. ...

A recent ruling by the Utilities Commission in a request for Declaratory Ruling by the Water and Sewer Authority of Cabarrus County found that biosolids (the organic material remaining after

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<sup>1</sup> March 2010 Report, page 3.

the treatment of domestic sewage) is a renewable energy resource for combustion purposes. ... The Utilities Commission in the order writes, "G.S. 62-133.8(a)(8) includes any biomass resource, listing several examples without limitation."<sup>2</sup> The Commission's order indicates that it will interpret the definition of biomass resource very broadly.<sup>3</sup>

The North Carolina Biomass Council has developed a roadmap<sup>4</sup> at the request of the North Carolina State Energy Office as a tool to assist stakeholders in planning North Carolina's future biomass utilization. This roadmap defines biomass as "any organic matter that is available on a renewable or recurring basis, including agricultural crops and trees, wood and wood wastes and residues, plants (including aquatic plants), grasses, residues, fibers, animal wastes, and segregated municipal waste ... Processing and conversion derivatives of organic matter are also biomass."

In its definition of "renewable energy resource", the General Assembly did not utilize the foregoing definition of biomass or simply use the term "biomass."<sup>5</sup> Instead, the legislature opted to utilize the phrase "a biomass resource, including agricultural waste, animal waste, wood waste, spent pulping liquors, combustible residues, combustible gases, energy crops or landfill methane."

I am of the opinion that use of the foregoing phraseology indicates that, in enacting Senate Bill 3, the legislature intended that only certain limited forms of biomass would qualify as a renewable energy resource for REPS compliance purposes; and that those forms are those that are specifically enumerated in the statute and others not named that are *ejusdem generis*.<sup>6 7</sup>

As applicable to this matter, the rule of statutory *ejusdem generis* provides that where general words (e.g. agricultural waste, animal waste, wood waste, etc.) follow a particular subject (i.e. biomass resource), the meaning of the general words will

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<sup>2</sup> This dictum was unnecessary with respect to the Commission's narrow holding in Docket No. SP-100, Sub 25, i.e. that biosolids are included as a biomass resource for Senate Bill 3 purposes. Insofar as this dictum should be interpreted to say that "biomass resource" in G.S. 62-133.8(a)(8) includes all biomass without any limitation, it is not a correct statement of the law as I believe it to be.

<sup>3</sup> Thus, interestingly, the EMC correctly predicted the majority's decision in this docket.

<sup>4</sup> The North Carolina **Biomass Roadmap**: Recommendations for Fossil Fuel Displacement through Biomass Utilization, May 2007.

<sup>5</sup> That is to say, the legislature could have defined renewable energy resource as "a solar electric, solar thermal, wind, hydropower, geothermal, **biomass**, or ocean current or wave energy resource ...", but it chose not to do so.

<sup>6</sup> **EJUSDEM GENERIS**. Of the same kind, class, or nature. Black's Law Dictionary, 4<sup>th</sup> Ed.Rev.

<sup>7</sup> e.g. Refuse-derived fuel segregated from municipal solid waste (NCUC Docket No. SP-100, Sub 23); Biosolids (organic material remaining after treatment of domestic sewage)(NCUC Docket No. SP-100, Sub 25); and Natural rubber component of tire-derived fuel (NCUC Docket No. SP-165, Sub 3).

ordinarily be presumed to be, and construed as, restricted by the particular designations and as including only things of the same kind, character and nature as those specifically enumerated. See Knight v. Town of Knightdale, 164 N.C.App. 766, 769, 770 (2004). As noted by the North Carolina Sustainable Energy Association (NCSEA), in Senate Bill 3 a biomass qualifies as a renewable energy resource when, beyond being biomass, it is generally either a secondary material (e.g. “agricultural waste, animal waste, wood waste, spent pulping liquors, combustible residues”) or primary material cultivated or collected specifically for energy production (e.g. energy crops, landfill gas).<sup>8</sup> Wood chips derived from the harvesting of mature growth whole trees does not fit into either of these categories, nor is it of the same kind, character and nature of the forms of biomass specifically enumerated in G.S. 62-133.8(a)(8).

Had the legislature intended the term “biomass resource” in Senate Bill 3 to include whole trees, it would have been more than easy enough for it to have done so by using the term “trees, wood and wood waste” or “wood and wood waste” (or even simply “wood” without any limitation) – or, as previously noted, by simply utilizing the term “biomass” without any other words of limitation, in lieu of the term “wood waste.” Put another way, I believe that had the North Carolina legislature intended to include the primary harvest of whole trees as a Senate Bill 3 biomass resource, it would have done so in no uncertain terms.<sup>9</sup>

Furthermore, in light of the importance of the forestry industry to the State of North Carolina, a well-known fact recognized by the General Assembly,<sup>10</sup> I am unable to accept the idea of the state legislature enacting law that permits the clear cutting of old

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<sup>8</sup> NCSEA’s Post-Hearing Brief, page 6.

<sup>9</sup> For example, see Michigan 2008 PA 295, Sec. 3(f) which reads, in pertinent part:

*“Biomass” means any organic material that is not derived from fossil fuels, ... including, but is not limited to, all of the following:*

...

*(iv) Trees and wood, but only if derived from sustainably managed forests or procurement systems, as defined in Section 261c of the management and budget act ... .*

...

*(vi) Precommercial wood thinning waste, brush, or yard waste.*

*(vii) Wood wastes and residues from the processing of wood products or paper.*

<sup>10</sup> See G.S. Chapter 113A, Article II, *Forest Development Act* where G.S. 133A-177(a) reads, in pertinent part:

The General Assembly finds that:

(1) It is in the public interest of the State to encourage the development of the State’s forest resources and the protection and improvement of the forest environment.

...

(3) Regeneration of potentially productive forest land is a high-priority problem requiring prompt attention and action. ...

growth forest land for electricity generation purposes without providing concomitant requirements of best forestry practices and/or other sustainability measures.<sup>11</sup>

\s\ William T. Culpepper, III  
Commissioner William T. Culpepper, III

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<sup>11</sup> As noted on page 12 of this Order, Duke does not intend to place any sustainability requirements on its whole tree vendors, since there are no statutory or regulatory provisions mandating such requirements.



North Carolina Secretary of State as cleanfields renewable energy demonstration parks pursuant to Senate Bill 886, to which triple credits may apply, may not exceed the eligible output of the first 20 MW of capacity in all cleanfields renewable energy demonstration parks in the State. Any capacity beyond 20 MW in such demonstration parks would be eligible to earn RECs pursuant to G.S. 62-133.8, but such RECs would not be eligible for triple credit pursuant to Senate Bill 886.

- e) That, if the BTE Facility is determined by the Commission to be a biomass new renewable energy facility and is located on a tract of land designated by the North Carolina Secretary of State as a cleanfields renewable energy demonstration park pursuant to Senate Bill 886, the number of RECs earned from the generation of electricity by the BTE Facility will be a function of the capacity factor of the BTE Facility and the Renewable Energy Percentage of the Syngas used.
- f) That RECs generated by the BTE Facility will be recorded in its North Carolina Renewable Energy Tracking System (NC-RETS) account as a unique fuel type, e.g., "S886 Biomass," and one megawatt-hour (MWh) so recorded will equal a single REC. The electric power supplier that purchases such a REC for compliance with G.S. 62-133.8 will receive one S886 Biomass REC. When the electric power supplier retires the one S886 Biomass REC, it will receive triple credit, resulting in one general obligation REC and two additional credits. The electric power supplier will use and retire the S886 Biomass REC and the two additional credits described in Section 4 of Senate Bill 886 for compliance purposes in accordance with the NC-RETS Operating Procedures.
- g) That the additional credits are eligible for use to meet the requirements of G.S. 62-133.8(f), and they must first be used to satisfy those requirements. Only when the requirements of G.S. 62-133.8(f) are met may the additional credits be utilized to comply with G.S. 62-133.8(b) and (c).
- h) That the normal provisions on banking RECs contained in Commission Rule R8-67 apply equally to the RECs described in Section 4 of Senate Bill 886, and nothing in Rule R8-67 or in Senate Bill 886 limits the order in which an electric power supplier may retire banked RECs.

In support of its request, ReVenture argued that granting its requested relief will further the policy goals of G.S. 62-2(a)(10) by (a) diversifying the resources used to reliably meet the energy needs of consumers in the State; (b) providing greater energy security through the use of indigenous energy resources available within the State; (c) encouraging private investment in renewable energy and energy efficiency; and (d) providing improved air quality and other benefits to energy consumers and citizens of the State.

On April 4, 2011, Blue Ridge Environmental Defense League, Inc. (BREDL), filed a petition to intervene, which was granted by Order issued April 7, 2011. The Public Staff presented this matter to the Commission at its Regular Staff Conference on April 4, 2011.

### Definition of “Renewable Energy Resources”

The first three requested declaratory rulings require decisions by the Commission as to whether yard waste, RDF and Syngas, as described in the petition, are “renewable energy resources” as defined by G.S. 62-133.8(a)(8). “Renewable energy resource” is defined as follows:

a solar electric, solar thermal, wind, hydropower, geothermal, or ocean current or wave energy resource; a biomass resource, including agricultural 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 resource.

ReVenture argues that yard waste, the percentage of RDF determined by testing to be biomass, and the percentage of Syngas attributable to these renewable energy resources are each a biomass resource, which is included in the definition of renewable energy resource. ReVenture argues that the list of resources following the words “biomass resource, including” in the definition of renewable energy resource is a list of examples, not an exhaustive list. ReVenture cites the definition of biomass, “[a]ny organic matter that is available on a renewable or recurring basis,” adopted by the North Carolina Biomass Council in its May 2007 Biomass Roadmap.

First, ReVenture requests that the Commission declare that the yard waste proposed for use in the BTE Facility, which it intends to source from the Mecklenburg County Compost Central Facility, is a renewable energy resource. ReVenture argues that yard waste, which is comprised of leaves, brush, grass clippings, and tree limbs, is all organic plant material. ReVenture argues that these materials are “waste” in the same sense as wood waste, which is included in the statutory definition of biomass. In addition, notes ReVenture, the United States Environmental Protection Agency recognizes yard waste as an organic material.

Second, ReVenture requests that the Commission declare that the percentage of RDF, determined by testing to be biomass, proposed for use in the proposed BTE Facility is a renewable energy resource. ReVenture states that RDF is derived from municipal solid waste (MSW) that is collected at the curb by Mecklenburg County. The MSW is separated into component materials: including metals, glass, large cardboard items, certain plastics, and other materials for recycling; the majority of paper, certain

cardboard, paper packaging, and small items of wood for processing into RDF; and residual “unusable waste” for transporting to a landfill. The separated MSW will be processed and shredded into small particle sizes and packed for shipment to ReVenture Park as RDF for use as fuel at the proposed BTE Facility. ReVenture argues that the Commission, in its March 25, 2009 Order in Docket No. SP-100, Sub 23, previously concluded that RDF derived from MSW that is determined by testing to be biomass, subject to verification of the testing procedures and results, is a renewable energy resource, as defined in G.S. 62-133.8(a)(8).

Lastly, ReVenture requests that the Commission declare that the percentage of Syngas, a combustible gas produced from the yard waste and RDF, is a renewable energy resource where the percentage of Syngas is weighted to reflect the energy derived from renewable energy resources used in its production in proportion to the relative energy content of the fuels used. ReVenture notes that Commission Rule R8-67(d)(2) provides that,

for any facility that uses both renewable energy resources and nonrenewable energy resources to produce energy, the facility shall earn [RECs] based only upon the energy derived from renewable energy resources in proportion to the relative energy content of the fuels used.

ReVenture states that the Syngas used as fuel by the proposed BTE Facility is produced from a combination of renewable energy resources (yard waste and the biomass percentage of the RDF) and nonrenewable energy resources (the non-biomass percentage of the RDF). ReVenture proposes that only the percentage of Syngas attributable to the renewable energy resources be used in calculating RECs earned by the proposed BTE Facility, taking into account the relative Btu value of the yard waste and the percentage of RDF determined by testing to be biomass.

In its comments, BREDL opposes ReVenture’s requests that yard waste, RDF and Syngas be declared to be renewable energy resources. It argues that, to be renewable, a source of energy must renew, recharge or regenerate itself. While this would “plainly include wind, solar and hydro energy sources,” argues BREDL, RDF and municipal yard waste are not acceptable energy resources. BREDL argues that yard waste should not be considered as a fuel for energy production because, first, it is recyclable as compost and need not be deposited in a landfill. Second, Mecklenburg County operates a municipal yard waste composting facility, and there is no benefit to the public or the environment to divert the yard waste from this facility to the proposed BTE Facility. BREDL further objects to ReVenture’s request that RDF be declared to be a renewable energy resource. BREDL argues that RDF, or MSW, is not present in the definition of renewable energy in G.S. 62-133.8(a)(8). BREDL notes that the Commission, in its Order in Docket No. SP-100, Sub 23 regarding RDF, stated that its decision should not be regarded as precedent for any other person engaging in activities other than those found in that case. BREDL argues that the Commission’s Order in that case relied solely on the interpretations, descriptions and assertions of industry representatives seeking the declaratory ruling. BREDL challenged the SO<sub>x</sub>,

NO<sub>x</sub> and CO<sub>2</sub> emission reductions claimed in that case, stating that, for many pollutants, biomass units are dirtier than coal-fired power plants: “The use of biomass fuel will not reduce levels of carbon dioxide in the atmosphere; therefore, it cannot be part of the solution to global warming in the 21<sup>st</sup> Century.” In conclusion, BREDL argues:

ReVenture has failed to meet its burden in its request to have refuse derived fuel and yard waste deemed renewable energy resources. Granting the REQUEST would not reduce the amount of yard waste going to the landfill, it would simply take it from a viable county-wide composting operation. Further, the combustion of refuse derived fuel would have a negative impact on air quality in Charlotte and would not reduce greenhouse gas emissions. ... We respectfully request that the Commission deny the REQUEST.

In presenting this agenda item to the Commission, the Public Staff supports ReVenture’s request and recommends, based upon the facts and representations made in the request, that the Commission declare that yard waste and the percentage of RDF determined by testing to be biomass, when utilized as fuel at ReVenture’s proposed BTE Facility, are renewable energy resources as that term is defined by G.S. 62-133.8(a)(8). In addition, the Public Staff recommends that the Commission declare that the percentage of Syngas produced from these fuels is a renewable energy resource as defined by G.S. 62-133.8(a)(8), when calculated as proposed by ReVenture.

After careful consideration of the entire record in this docket, including the Public Staff’s recommendations, the Commission concludes, as requested by ReVenture, that yard waste, the percentage of RDF determined by testing to be biomass, and the percentage of Syngas attributable to these renewable energy resources are each a biomass resource and a renewable energy resource. In its February 29, 2008 Order Adopting Final Rules in Docket No. E-100, Sub 113, the Commission adopted Rules R8-66 and R8-67 to implement the Renewable Energy and Energy Efficiency Portfolio Standard (REPS) established by the General Assembly in Session Law 2007-397 (Senate Bill 3). In that Order, the Commission concluded that the determination of whether a resource is a “renewable energy resource” or a “biomass resource” should be made on a case-by-case basis.

As ReVenture notes, the Commission, in Docket No. SP-100, Sub 23, has previously considered RDF and Syngas and determined that the percentage of RDF determined by testing to be biomass and the percentage of Syngas derived therefrom are renewable energy resources. The case-by-case determination referenced in the February 29, 2008 Order in Docket No. E-100, Sub 113 was with regard to particular fuels, not facilities. The Commission is not persuaded that there is any reason to reach a different conclusion in this docket regarding RDF and Syngas.

With regard to yard waste, it is undisputed that yard waste is organic plant material and that organic plant material is biomass. The only question, then, is whether

yard waste, which is not specifically mentioned in the definition of biomass resource in G.S. 62-133.8(a)(8), is a renewable energy resource. In its October 11, 2010 Order in Docket No. E-7, Subs 939 and 940, the Commission allowed Duke Energy Carolinas, LLC, to earn RECs from the combustion of wood chips derived from whole trees. In that case, the Commission noted that neither the statute nor the Commission's rules implementing Senate Bill 3 defines biomass resource, and concluded that the list of biomass resources identified in the statute was not exhaustive, but merely illustrative. Similarly, in this case, the Commission concludes that yard waste, a biomass resource, meets the definition of renewable energy resource.

BREDL would have the Commission declare that yard waste and RDF derived from MSW are not renewable energy resources. The Commission, however, concludes that the General Assembly has already made the decision that biomass, including yard waste and the percentage of RDF determined to be biomass, are renewable energy resources. In interpreting the statutory definition, the Commission must first look to the language of the statute. A statute that is clear and unambiguous must be construed using its plain meaning. Burgess v. Your House of Raleigh, Inc., 326 N.C. 205, 209, 388 S.E.2d 134, 136 (1990). Notwithstanding BREDL's arguments about the relative emissions from biomass, it is clear from the language of the statute that the General Assembly considered this issue and specifically intended to include biomass resources as renewable energy resources. In addition to the explicit inclusion of biomass resource in the definition of renewable energy resource, G.S. 62-133.8(g) provides that a biomass combustion process at any new renewable energy facility that delivers electric power to an electric power supplier shall meet Best Available Control Technology (BACT) regarding the emission of air pollutants.

The Commission, therefore, concludes that ReVenture's first three requests for declaratory ruling should be granted

#### Interpretation and Implementation of Senate Bill 886

The remaining five declaratory rulings requested by ReVenture are related to the appropriate interpretation and implementation of Section 4 of Senate Bill 886, which provides as follows:

Renewable energy generation. – The definitions in G.S. 62-133.8 apply to this act. If the Utilities Commission determines that a biomass renewable energy facility located in the cleanfields renewable energy demonstration park is a new renewable energy facility, the Commission shall assign triple credit to any electric power or renewable energy certificates generated from renewable energy resources at the biomass renewable energy facility that are purchased by an electric power supplier for the purposes of compliance with G.S. 62-133.8. The additional credits shall be eligible for use to meet the requirements of G.S. 62-133.8(f). The additional credits shall first be used to satisfy the requirements of G.S. 62-133.8(f). Only when the requirements of G.S. 62-133.8(f) are met, shall the additional

credits be utilized to comply with G.S. 62-133.8(b) and (c). The triple credit shall apply only to the first 20 megawatts of biomass renewable energy facility generation capacity located in all cleanfields renewable energy demonstration parks in the State. [Emphasis added.]

ReVenture states that it will seek certification of the Eco-Park as a cleanfields renewable energy demonstration park from the Secretary of State pursuant to Section 3 of Senate Bill 886, and that it will file such certification with the Commission. If the Eco-Park is designated as a cleanfields renewable energy demonstration park by the Secretary of State and the BTE Facility is determined to be a biomass renewable energy facility and a new renewable energy facility by the Commission, ReVenture proposes that the RECs earned by the BTE Facility be calculated as follows: (1) the total capacity of the BTE Facility (up to a maximum of 20 MW) will be multiplied by the number of hours in a calendar year; (2) the product of Step 1 will be multiplied by the capacity factor of the BTE Facility; and (3) the product of Step 2 will be multiplied by the Renewable Energy Percentage of the Syngas, as defined above. ReVenture requests a declaratory ruling that the total RECs generated annually from renewable energy resources at all biomass new renewable energy facilities located on tracts of land designated by the North Carolina Secretary of State as cleanfields renewable energy demonstration parks pursuant to Senate Bill 886, to which triple credits may apply, may not exceed the eligible output of the first 20 MW of capacity in all cleanfields renewable energy demonstration parks in the State. Any capacity beyond 20 MW in such demonstration parks would be eligible to earn RECs pursuant to G.S. 62-133.8, but such RECs would not be eligible for triple credit pursuant to Senate Bill 886.

ReVenture further requests that the Commission declare that RECs generated by the proposed BTE Facility be recorded in its NC-RETS account as a unique fuel type, e.g., "S886 Biomass," and that one megawatt-hour so recorded will equal a single S886 Biomass REC. The electric power supplier that purchases such a REC from ReVenture for compliance with G.S. 62-133.8 will receive one S886 Biomass REC. When the electric power supplier retires the one S886 Biomass REC, it will receive triple credit, resulting in one general obligation REC and two additional credits. The additional credits are eligible for use to meet the poultry waste resource set-aside requirements of G.S. 62-133.8(f), and they must first be used to satisfy those requirements. Only when the requirements of G.S. 62-133.8(f) are met may the additional credits be utilized to comply with the general REPS requirements of G.S. 62-133.8(b) and (c). Lastly, ReVenture requests that the Commission declare that the triple credit ceases to apply after its application to the first 20 MW of biomass renewable energy facility generation capacity located in all cleanfields renewable energy demonstration parks in the State.

In its comments, BREDL did not address these issues, stating that they are irrelevant if the fuels are not recognized as renewable energy resources.

In presenting this agenda item to the Commission, the Public Staff supports ReVenture's request and recommends that the Commission issue an order granting the declaratory rulings requested by ReVenture.

After careful consideration of the entire record in this docket, including the Public Staff's recommendations, the Commission concludes that ReVenture's sixth, seventh and eighth requests for declaratory rulings should be granted.

With regard to ReVenture's sixth and seventh requests for declaratory rulings, the Commission agrees that RECs associated with energy produced by the proposed BTE Facility should be recorded in NC-RETS as a unique fuel type and that an electric power supplier that purchases and retires such a REC for compliance with G.S. 62-133.8 will receive one general biomass REC and two additional credits that must first be used to meet the REPS poultry waste set-aside requirement. In order to address concerns of other REC tracking systems across the nation that one REC represents one megawatt-hour of renewable energy generation, NC-RETS will only create the one REC actually associated with the one megawatt-hour of generation by the proposed BTE Facility. The REC and the additional credits will be retired for REPS compliance in accordance with the NC-RETS Operating Procedures.

With regard to ReVenture's eighth request, the Commission agrees that, except for the triple credit, all of the provisions of G.S. 62-133.8 and Rule R8-67 would apply equally to the RECs associated with energy produced by the proposed BTE Facility as to RECs associated with energy produced at any other renewable energy facility.

With regard to ReVenture's fourth and fifth requests for declaratory rulings, however, the Commission is not persuaded that the calculations proposed by ReVenture are necessary. In this case, ReVenture states that the proposed BTE Facility will only be capable of producing up to 20 MW of electricity. Thus, because the triple credit is limited "to the first 20 megawatts of biomass renewable energy facility generation capacity located in all cleanfields renewable energy demonstration parks in the State," all of the RECs earned by ReVenture would be eligible for the triple credit. Accounting for the capacity factor of the generating facility would only appear to be relevant if the capacity of the BTE Facility were proposed to be greater than 20 MW and the output from the facility were required to be allocated between the first 20 MW and the remaining capacity. Such is not proposed in this case regarding ReVenture's BTE Facility.

The Commission additionally declines to grant the fourth declaratory ruling requested by ReVenture because it appears to ignore the possibility that the facility may also earn RECs from the capture and use of waste heat as a combined heat and power facility. In its request, ReVenture does not define what it means by "eligible output." The Commission notes that Senate Bill 886 states simply that "[t]he triple credit shall apply only to the first 20 megawatts of biomass renewable energy facility generation capacity located in all cleanfields renewable energy demonstration parks in the State." The limit, therefore, is on the electric generating capacity of the facility or facilities, not the energy or RECs that may be earned by the facility or facilities. For example, if the BTE Facility were a combined heat and power facility, it could earn RECs associated with both the electric generation and the "waste heat [used] to produce electricity or useful, measurable thermal or mechanical energy at a retail electric customer's facility." As

provided in Senate Bill 886, the triple credit is applied to any electric power or RECs generated from renewable energy resources at the biomass renewable energy facility that are purchased by an electric power supplier for the purposes of compliance with G.S. 62-133.8. The Commission agrees with ReVenture, therefore, that, under Senate Bill 886, any electric generating capacity beyond 20 MW located in cleanfields renewable energy demonstration parks in the State are not eligible for the triple credit. However, the Commission is not persuaded that Senate Bill 886 limits the number of RECs that may be earned by the first 20 MW of electric generating capacity to the electric power generated at the facility.

The Commission further declines to grant ReVenture's fifth request for declaratory ruling, whereby the number of RECs earned from the generation of electricity by the proposed BTE Facility would be a function of the capacity factor of the BTE Facility and the percentage of Syngas determined to be derived from renewable resources. Commission Rule R8-67(g)(1) states that "the electric power generated by a renewable energy facility shall be measured by an electric meter supplied by and read by an electric power supplier." The NC-RETS Operating Procedures outline procedures for creating RECs from facilities that use multiple fuels, some of which do not qualify for RECs. ReVenture has not provided any explanation as to why these rules and procedures should not apply to the proposed BTE Facility. Therefore, the Commission will decline to grant ReVenture's fifth request for a declaratory ruling.

The Commission notes that the present decision is limited to the facts set forth in this Order and ReVenture's request and should not be regarded as a precedent for any other person engaging in activities other than those found in this case.

IT IS, THEREFORE, ORDERED as follows:

1. That yard waste (the leaves, brush, grass clippings and tree limbs) and the percentage of RDF, determined by testing to be biomass, when utilized as fuel at ReVenture's proposed BTE Facility, are renewable energy resources as that term is defined by G.S. 62-133.8(a)(8).

2. That the percentage of Syngas produced by the proposed BTE Facility from yard waste and the percentage of RDF determined by testing to be biomass is a renewable energy resource as defined by G.S. 62-133.8(a)(8), where the percentage of Syngas is weighted to reflect the energy derived from renewable energy resources used in its production in proportion to the relative energy content of the fuels used.

3. That, under Section 4 of Senate Bill 886, the triple credit shall apply only to the first 20 MW of biomass renewable energy facility generation capacity located in all cleanfields renewable energy demonstration parks in the State, and that, while any capacity beyond 20 MW in such demonstration parks would be eligible to earn RECs pursuant to G.S. 62-133.8, such RECs are not eligible for the triple credit pursuant to Senate Bill 886.

4. That the number of RECs earned from the generation of electricity by the proposed BTE Facility will be determined based on meter readings by an electric power supplier and the NC-RETS Operating Procedures' provisions regarding calculating RECs from multi-fuel facilities.

5. That RECs eligible for the triple credit pursuant to Section 4 of Senate Bill 886 will be recorded in NC-RETS as a unique fuel type, and that one megawatt-hour so recorded will equal a single REC of that type.

6. That the electric power supplier that purchases a REC eligible for the triple credit pursuant to Section 4 of Senate Bill 886 for compliance with G.S. 62-133.8 will receive one REC. When the electric power supplier retires that REC, it will receive triple credit, resulting in one general obligation REC and two additional credits.

7. That the electric power supplier will use and retire the REC eligible for the triple credit pursuant to Section 4 of Senate Bill 886 and the two additional credits in accordance with the NC-RETS Operating Procedures.

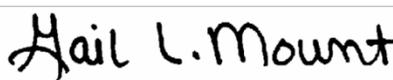
8. That the additional credits associated with a REC eligible for the triple credit pursuant to Section 4 of Senate Bill 886 are eligible for use to meet the requirements of G.S. 62-133.8(f), and that they must first be used to satisfy those requirements. Only when the requirements of G.S. 62-133.8(f) are met may the additional credits be utilized to comply with G.S. 62-133.8(b) and (c).

9. That, except for the triple credit, all of the provisions of G.S. 62-133.8 and Rule R8-67 will apply equally to the RECs associated with energy produced by the proposed BTE Facility as to RECs associated with energy produced at any other renewable energy facility.

ISSUED BY ORDER OF THE COMMISSION.

This the 18<sup>th</sup> day of April, 2011.

NORTH CAROLINA UTILITIES COMMISSION

A rectangular box containing a handwritten signature in black ink that reads "Gail L. Mount".

Gail L. Mount, Deputy Clerk

Commissioner William T. Culpepper, III, concurs. Chairman Edward S. Finley, Jr. and Commissioner Bryan E. Beatty did not participate.

Sw041811.02

**DOCKET NO. SP-100, SUB 28**

**Commissioner William T. Culpepper, III, concurring:**

I write separately to concur in the decision in this Order on Request for Declaratory Ruling. I dissented, in part, in the Commission's October 11, 2010, Order Accepting Registration of Renewable Energy Facilities in Docket No. E-7, Subs 939 and 940 on the issue of whether whole trees harvested for the purpose of electricity generation qualify as a biomass resource and a renewable energy resource under Senate Bill 3. As in that case, I believe that, in enacting Senate Bill 3, the legislature intended that only certain limited forms of biomass would qualify as a renewable energy resource for REPS compliance purposes, and that those forms are those that are specifically enumerated in the statute and others not named that are ejusdem generis, or of the same kind, class or nature. In that case I dissented because I do not believe that wood chips derived from the harvesting of mature growth whole trees are either "agricultural waste, animal waste, wood waste, spent pulping liquors, combustible residues, combustible liquids, combustible gases, energy crops, or landfill methane." In this case, however, I believe that yard waste is a form of biomass that is ejusdem generis to those forms of biomass that are specifically enumerated in the statute, and for that reason, I concur in the decision reached by the majority.

**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

DOCKET NO. SP-100, SUB 9  
DOCKET NO. SP-967, SUB 0

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. SP-100, SUB 9	)	
	)	
In the Matter of	)	
Request for Supplemental Declaratory Ruling of	)	ORDER ON REQUEST
Wake Gas Producers, LLC, and Raleigh Steam	)	FOR SUPPLEMENTAL
Producers, LLC	)	DECLARATORY RULINGS
	)	AND REGISTRATION OF
DOCKET NO. SP-967, SUB 0	)	NEW RENEWABLE ENERGY
	)	FACILITY
In the Matter of	)	
Application of Raleigh Steam Producers, LLC,	)	
For Registration of a New Renewable Energy	)	
Facility	)	

BY THE COMMISSION: On January 7, 2011, Raleigh Steam Producers, LLC (RSP), and Wake Gas Producers, LLC (WGP) (collectively, Petitioners), filed a Petition for Supplemental Declaratory Rulings in Docket No. SP-100, Sub 9. Concurrently, in Docket No. SP-967, Sub 0, RSP filed a report of proposed construction pursuant to Commission Rule R8-65 and a registration statement pursuant to Rule R8-66 for a new renewable energy facility to be located in Raleigh in Wake County, North Carolina. RSP stated that the first phase of its 2.8-MW landfill gas-fueled facility is expected to become operational in late 2011. On March 11, 2011, Petitioners filed an amended Petition, report of proposed construction, and registration statement in the respective dockets.

RSP currently operates two boilers providing steam to Covidien-Mallinckrodt (Mallinckrodt) at its industrial plant in northern Wake County. Boiler 5, the larger of the two, is fueled by landfill gas collected by WGP at the North Wake County Landfill (the Landfill) and sold to RSP. The RSP plant produces no electricity at present and, thus, does not earn any renewable energy certificates (RECs) under the North Carolina Renewable Energy and Energy Efficiency Portfolio Standard (REPS).

Because WGP is producing more gas than RSP can currently use to generate process steam for the Mallinckrodt plant, RSP is considering a two-stage expansion of its plant, with the installation of one or more electric generators operating as combined heat and power (CHP) facilities eligible to earn electric and thermal RECs. The first stage of RSP's expansion project will involve extensive modifications to Boiler 5, the installation of a new Boiler 7, and the installation of a 750-kW low pressure dual steam turbine generator. The two boilers will produce steam for the dual turbines driving the

generator, allowing process steam at two separate pressures to be produced and delivered to Mallinckrodt for process steam use. These boilers will continue to burn landfill gas as their primary fuel, but both Boilers 5 and 7 will also burn approximately 10% natural gas. In addition, up to 25% of the fuel for Boiler 7 will consist of a waste process tar generated during pharmaceutical manufacturing operations. Computerized metering equipment will track the proportions of each fuel burned, and no RECs will be sought for power attributable to nonrenewable fuels. At this time, RSP is not requesting a determination by the Commission that the waste process tar is a renewable fuel.

If RSP proceeds with the second phase of its expansion plan, Boiler 7 will be modified to produce steam at a higher temperature and pressure, and a new 790-kW turbine generator will be added. The steam produced in Boiler 7 will be routed to this new turbine generator; the steam produced in Boiler 5 will continue to go to the turbine generator installed in the first phase, which will be operated at a reduced capacity of 410 kW. In addition, as part of the second phase, RSP may install a 1.6-MW landfill gas-fueled CAT 3520 engine/generator set with heat recovery equipment. The waste heat from the engine/generator set will be used to heat feedwater for all of the boilers, including Boilers 5 and 7. RSP stated that, if it actually plans to install electric generating capacity totaling 2 MW or more, it will apply for a certificate of public convenience and necessity pursuant to G.S. 62-110.1. All of the electric power generated on the site will be sold to Progress Energy.

In the Petition, Petitioners request that the Commission hold (1) that RSP's planned expansion would not cause either Petitioner to be a public utility within the meaning of G.S. 62-3(23)(a), to be a utility with the meaning of Commission Rule R6-2(a), or to be "directly or indirectly ... furnishing ... public utility service" within the meaning of G.S. 62-110.1(a), and (2) that the electric and thermal energy produced at RSP's facility will be eligible for RECs under G.S. 62-133.8.

The registration statement included certified attestations that: 1) the facility is or will be in substantial compliance with all federal and state laws, regulations, and rules for the protection of the environment and conservation of natural resources; 2) the facility will be operated as a new renewable energy facility; 3) RSP will not remarket or otherwise resell any RECs sold to an electric power supplier to comply with G.S. 62-133.8; and 4) RSP will consent to the auditing of its books and records by the Public Staff insofar as those records relate to transactions with North Carolina electric power suppliers.

On March 25, 2011, the Public Staff filed a letter recommending that the Commission's acceptance of the registration statement be conditional upon its decision on the declaratory rulings.

The Public Staff presented this matter to the Commission at its regular Staff Conference on June 27, 2011. The Public Staff noted that the Petition presents three primary issues: the public utility status of Petitioners, the CHP status of the proposed generation, and the renewable energy facility status of the new facility.

## Public Utility Status

The first issue presented by the Petition is whether the sale of additional steam to Mallinckrodt by RSP, and the construction of the proposed new facilities, will result in either RSP or WGP becoming public utilities. The Commission has already held twice in Docket No. SP-100, Sub 9 that the arrangements WGP and RSP have made with Mallinckrodt do not result in their acquiring public utility status. Order on Request for Amendment to Declaratory Ruling (Nov. 3, 2005); Order on Request for Declaratory Ruling (July 31, 1996). In its 1996 order, the Commission noted that “the use of landfill gas to produce process steam for sale to a single manufacturer under a bargained for transaction did not fall within the definition of a public utility. The Steam Purchase agreement with Mallinckrodt prohibits the resale of steam delivered ... and will be for process use only.”

The Public Staff stated that, aside from the increased volume of gas being sold to RSP to produce steam for Mallinckrodt’s use and the planned construction of new facilities by RSP, there appear to have been no material changes in the contractual relationships among RSP, WGP and Mallinckrodt. The transaction between RSP and Mallinckrodt continues to be a bargained-for sale of steam to a single manufacturer for process use only. With regard to the sale of electricity, RSP stated that the facility will be certified as a qualifying facility pursuant to the federal Public Utility Regulatory Policies Act of 1978 (PURPA), 16 U.S.C. 796, and all of the electricity generated at the facility will be sold to Progress Energy Carolinas, Inc. The Public Staff, therefore, recommended that the Commission grant the requested declaratory ruling that the expansion of RSP’s facilities will not cause RSP or WGP to become public utilities.

As noted by the Public Staff, the Commission has considered the arrangements between WGP, RSP and Mallinckrodt on two previous occasions and concluded that neither WGP nor RSP would be considered to be public utilities. The Commission agrees with the Public Staff’s analysis that nothing in the proposed expansion would alter that conclusion. The primary change, the addition of electric generating capacity, would not cause RSP to be considered a public utility because all of the electricity generated by RSP will be sold to the local utility. See, Order on Request for Declaratory Ruling, Docket No. SP-100, Sub 0 (Feb. 29, 1984). Therefore, as requested by Petitioners, the Commission concludes that RSP’s planned expansion would not cause either WGP or RSP to be a public utility within the meaning of G.S. 62-3(23)(a), to be a utility with the meaning of Commission Rule R6-2(a), or to be “directly or indirectly ... furnishing ... public utility service” within the meaning of G.S. 62-110.1(a).

## CHP Status of the Planned Expansion Project

The Public Staff noted that the second issue presented by the Petition is whether RSP’s proposed turbine generators and engine/generator set are sufficiently large to provide the efficiency benefits normally associated with CHP. In other words, are these merely “token” generators, designed to make sure the thermal energy produced by RSP qualifies for RECs under G.S. 62-133.8, but not large enough to provide any practical economic benefit? The Public Staff indicated that it did not believe this to be the case.

In its view, the turbine generators are large enough to perform their intended function of regulating the pressure and volume of steam delivered to Mallinckrodt's industrial processes and will result in the generation of a significant amount of electricity. The Public Staff argued that in two recent cases the Commission has found that a proposed facility would generate sufficient electricity to be treated as a legitimate CHP facility, even though electric RECs were expected to constitute only a small portion of the total RECs generated by the facility. W.E. Partners I, LLC, Docket No. SP-729, Sub 1 (July 26, 2010) (in which only 2.5% of the facility's RECs would be associated with electric generation); W.E. Partners II, LLC, Docket No. SP-882, Sub 0 (Jan, 5, 2011) (in which only 2.1% of the facility's RECs would be associated with electric generation). In comparison, the Public Staff stated that it had determined that approximately 2.4% of the RECs produced during the first phase of the expansion at the RSP facility and 4.2% of the RECS produced during the second phase of the expansion will be associated with electric generation.

Whether RSP's proposed electric generating facility is a CHP would be relevant in determining whether it meets the definition of renewable energy facility or new renewable energy facility eligible to earn RECs for some or all of its electric and thermal energy. G.S. 62-133.8(a)(7) defines renewable energy facility, in relevant part, as a facility that "generates useful, measurable combined heat and power derived from a renewable energy resource," including landfill gas. G.S. 62-133.8(a)(1) defines a CHP system as "a system that uses waste heat to produce electricity or useful, measurable thermal or mechanical energy at a retail electric customer's facility."

The Commission concludes that there is no requirement in G.S. 62-133.8 that RECs associated with electricity generation comprise any minimum percentage of the total RECs earned by a CHP facility. The thermal energy for which RECs are sought, however, must be a byproduct of the electric generation that, if not captured and used, would be wasted. A REC is defined, in relevant part, under G.S. 62-133.8(a)(6) as "a tradable instrument that is equal to one megawatt hour of electricity or equivalent energy supplied by a renewable energy facility [or] new renewable energy facility." (Emphasis added.) Thus, a CHP facility may earn RECs for each megawatt-hour of electricity generated from a renewable energy resource as well as each megawatt-hour equivalent of waste heat generated from a renewable energy resource that is captured and used to produce electricity or useful, measurable thermal or mechanical energy at a retail electric customer's facility. Rule R8-67(g)(4) provides that thermal RECs shall be earned based on one REC for every 3,412,000 British thermal units (Btu) of useful thermal energy produced. The prior decisions cited by the Public Staff contain no language to support its contention that there is or should be a minimum amount of RECs associated with electric generation. The Commission, therefore, concludes that a CHP, as provided in G.S. 62-133.8, is simply an electric generating facility that, in addition to generating electricity, also captures and uses heat that would otherwise be wasted in order to produce electricity or useful, measurable thermal or mechanical energy at a retail electric customer's facility.

The statutory requirement that the waste heat be used to produce electricity or useful, measurable thermal or mechanical energy at a retail electric customer's facility

prohibits a facility from earning RECs for thermal energy that is reused by the generator itself and is only indirectly used to generate electricity. For example, waste heat captured and used to maintain temperature in an anaerobic digester that is generating the biogas used to generate electricity is not producing useful, measurable thermal or mechanical energy at a retail electric customer's facility. See, Order Accepting Registration of New Renewable Energy Facility, Docket No. SP-578, Sub 0 (Jan. 20, 2010). Rather, it is increasing the efficiency of the generator itself, resulting in more electric generation and associated RECs. Similarly, in this case, waste heat used to pre-heat the feedwater for the boilers that are producing the steam used to generate electricity is not producing useful, measurable thermal or mechanical energy at a retail electric customer's facility, but is increasing the efficiency of the generator itself, and would not be eligible to earn RECs.

#### "New Renewable Energy Facility" Status

Lastly, the Public Staff noted that the Commission must determine whether the RSP plant, after completion of the planned expansion, will be considered a "new renewable energy facility" under G.S. 62-133.8(a)(5) eligible to earn RECs that can be used for REPS compliance by electric public utilities, an "old" renewable energy facility whose RECs can be used only by electric membership corporations and municipalities, or a combination of old and new facilities. While asserting that the Commission had addressed this issue in several previous decisions, the Public Staff stated that it could discern no clear rule for deciding the issue aside from the statutory requirement that a new renewable energy facility must be "placed into service on or after January 1, 2007." In support of its position, the Public Staff cited four prior Commission decisions, two involving facilities owned by Duke Energy Carolinas, LLC (Duke), and two nonutility-owned facilities.

The Public Staff first noted that, in its June 17, 2009 Order on Public Staff's Motion for Clarification in Docket No. E-100, Sub 113, the Commission considered the question of whether RECs could be earned by a hydroelectric plant with a capacity of more than 10 MW, where the plant is composed of multiple generating units of less than 10 MW capacity. In that order, the Commission agreed with the Public Staff that the individual generating units at the plant would not be considered separate facilities, and further concluded that an electric public utility cannot use utility-owned hydroelectric generation that was placed into service prior to January 1, 2007, for REPS compliance, regardless of the size of a unit or the facility of which it is a part, but that it may use power generated from new or incremental utility-owned hydroelectric generating capacity of 10 MW or less that was placed into service on or after January 1, 2007.

The Public Staff further cited the Commission's June 13, 2008 Order in Docket No. SP-161, Sub 1 in which it granted Coastal Carolina Clean Power, LLC (Coastal), a certificate of public convenience and necessity (CPCN) and accepted registration of its 32 MW biomass-fueled generating plant as a new renewable energy facility. Coastal's plant, originally a coal-fired cogeneration facility, had gone through a series of changes in ownership, had shut down in April 2007, and had been sold at foreclosure. In its application, Coastal indicated that it intended to spend more than \$11 million on repairs

and renovations to return the plant to service and to allow the plant to burn wood rather than coal.

The Public Staff also cited the Commission's December 17, 2009 Order in Docket No. SP-165, Sub 3 in which EPCOR USA North Carolina, LLC (EPCOR), sought registration as new renewable energy facilities for two coal-fired cogeneration plants it had acquired and modified to burn a mixture of wood waste, tire-derived fuel, and coal. In its order, the Commission held that the modifications were sufficient to allow the plants to be registered as new renewable energy facilities. The Public Staff asserted that the Commission did not elaborate on the basis for this determination, but simply pointed out that the Public Staff had recommended that the facilities should be considered new renewable energy facilities "by virtue of the fuel mix and the extensive and costly modification and additions that are being undertaken" and that the Commission had issued a similar ruling regarding Coastal.

Lastly, noted the Public Staff, in Docket No. E-7, Subs 939 and 940, Duke sought registration as new renewable energy facilities for its Buck and Lee Steam Stations, of which several units had been modified to co-fire biomass. The Commission accepted the registration of the plants as renewable energy facilities, but not as new renewable energy facilities. In its order, the Commission cited the June 17, 2009 Order in Docket No. E-100, Sub 113 as holding that "individual generating units that are components of a larger hydroelectric generating unit are not individual renewable energy facilities." The Public Staff stated that no party contended that only certain generating units at the Buck and Lee plants should be registered as renewable energy facilities.

The Public Staff stated that these four cases differ substantially in their facts and in the conclusions reached, and they do not establish a bright-line rule for determining when a modified or rebuilt plant constitutes a new renewable energy facility. However, it believed that the treatment of incremental generating capacity in the order regarding Duke's hydroelectric plants could provide useful guidance in reaching an equitable decision in this case. In that case, argued the Public Staff, the Commission held, as a general rule, that a "facility" constitutes an entire generating plant. Applying this general rule to RSP, the Public Staff concluded that the plant would most likely have to be ineligible for classification as a new renewable generating facility because Boiler 5 and several other major components of the plant date back to 1997 or earlier. As a result, RSP would not be able to earn any RECs that can be used by electric public utilities for REPS compliance. The Public Staff further argued, however, that the Commission created an exception in that order to its general rule for post-2007 expansion projects at hydroelectric plants providing that, when new capacity is added after 2007 to an existing hydroelectric plant, the incremental capacity will be treated as a new renewable energy facility for REPS purposes.

The Public Staff recommended that this same approach be applied not only to hydroelectric plants, but also to renewable facilities that are not hydroelectric, such as the RSP plant, which burns landfill gas. The Public Staff, therefore, recommended that, following the expansion of the RSP plant, the plant's incremental capacity, over and above its present capacity, should be treated as a new renewable energy facility,

earning RECs usable for compliance by electric public utilities. The Public Staff asserted that the same considerations that support applying this special rule to hydroelectric plant expansions are equally applicable to expansions of non-hydroelectric plants, such as RSP. In addition, the modification or expansion of existing renewable energy facilities may be less expensive than construction of new renewable energy facilities, and should be encouraged by the Commission where it would provide a more cost-effective means of compliance with the requirements of G.S. 62-133.8(b) and (c). The Public Staff indicated that it had been provided confidential information regarding the present production of the RSP plant in equivalent megawatt-hours of thermal energy per day. Following the plant expansion, the RSP plant should be treated as an “old” renewable energy facility up to this capacity level; and the incremental capacity above this level should be treated as a new renewable energy facility.

While the Commission’s prior decisions in this area might not provide as bright of a line as that sought by the Public Staff, the Commission does not agree that the determination of whether a facility is a renewable energy facility or a new renewable energy facility is as difficult as the Public Staff suggests. With the exception of solar thermal facilities and certain hydroelectric power facilities,<sup>1</sup> a renewable energy facility is a facility that generates electricity by the use of a renewable energy resource. In the case of Coastal, EPCOR, and Duke’s Buck and Lee plants, each sought registration of a facility that generated some or all of its electricity by the use of renewable energy resources. Thus, each met the definition of renewable energy facility in G.S. 62-133.8(a)(7).

With the exception, again, of certain hydroelectric power facilities and other grandfathered facilities, a new renewable energy facility is defined in G.S. 62-133.8(a)(5) as a renewable energy facility that was placed into service on or after January 1, 2007. The relevant questions, then, to be asked in these and similar cases to determine whether a renewable energy facility is also a new renewable energy facility are, first, whether electric generating equipment had previously been installed and operated at the site, and, if so, whether a substantial investment or improvement was necessary to begin generating some or all of the electricity from renewable energy resources. The facility is a new renewable energy facility if there was no existing capacity to generate electricity at this site or, if there was, a substantial investment or improvement was necessary to begin generating some or all of the electricity from renewable energy resources and the facility was placed into service on or after January 1, 2007.

In each of the cases involving Coastal, EPCOR, and Duke’s Buck and Lee plants, electric generating equipment had previously been installed and operated at the site. In the Coastal case, as the Public Staff noted, the owner of the facility invested a

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<sup>1</sup> The decision in the Commission’s June 17, 2009 Order in Docket No. E-100, Sub 113 that Duke’s existing hydroelectric facilities less than 10 MW are renewable energy facilities, not new renewable energy facilities, is based on an interpretation of language in G.S. 62-133.8 that is not at issue in this case. In that order, the Commission discussed at length the status of hydroelectric power facilities as renewable energy facilities or new renewable energy facilities, and will not repeat that discussion here. To the extent that the Public Staff is relying on that order to conclude that the three electric generators proposed by RSP at its Mallinckrodt location should be considered to be one “facility,” the Commission agrees.

substantial amount of money to convert the existing plant from coal to biomass, a renewable energy resource, and to return the plant to service. Thus, an existing facility was substantially rebuilt on or after January 1, 2007, to generate electricity by the use of renewable energy resources. Similarly, in the EPCOR case, existing facilities that had been designed and operated to burn coal exclusively to generate electricity were substantially rebuilt on or after January 1, 2007, to burn a mixture of coal and biomass. Although the Commission noted its similar ruling in the Coastal case, implicitly adopting the reasoning in that case on this issue, it did not specifically state in the EPCOR order that EPCOR had indicated in its application that it intended to spend approximately \$80 million to rework, renovate, and repower the facilities. In contrast, in its order in Docket No. E-7, Subs 939 and 940, regarding Duke's Buck and Lee plants, the Commission specifically distinguished the Coastal case in concluding that Duke's existing facilities did not meet the definition of new renewable energy facilities, noting that neither facility required extensive modifications to allow it to burn biomass. The Commission accepted registration of the facilities as renewable energy facilities, but not as new renewable energy facilities, stating,

Neither facility ... was placed into service after January 1, 2007; rather, Duke witness Beer testified that Buck and Lee were placed into service in the 1950s. Moreover, neither facility required extensive modifications to allow it to burn biomass, as was the case with Coastal Carolina Clean Power in Docket No. SP-161, Sub 1. In fact, in her direct testimony, Duke witness Beer stated that the air permit for Lee already allows Duke to burn certain wood products as an alternative fuel. She further testified on cross-examination that co-firing tests had been undertaken at Lee much earlier than 2007, stating:

That project [Lee] utilized existing infrastructure from the mid 1990s when the Company [Duke] initially co-fired biomass. And we resurrected it, added a little more money to it, and have been burning biomass ever since. The reason that we went there first was because we had that existing infrastructure and were able to test this material in a very low capital way.

Therefore, applying this analysis to the facts in this case, the Commission concludes that RSP's expanded plant, which will generate some or all of its electricity by the use of renewable energy resources, is a renewable energy facility pursuant to G.S. 62-133.8(a)(7). Because there was no existing capacity to generate electricity at this site and the facility is to be placed into service on or after January 1, 2007, RSP's proposed CHP facility further meets the definition of a new renewable energy facility.

Based upon the foregoing and the entire record in this proceeding, including the source of fuel stated in the registration statement, the Commission finds good cause to accept registration of RSP's landfill gas-fueled CHP facility as a new renewable energy facility. Pursuant to Commission Rule R8-67(d)(2), because RSP is using multiple fuels to generate electricity and steam, the facility shall earn RECs based only upon the

energy derived from the renewable energy resources in proportion to the relative energy content of the fuels used. As discussed above, only that waste heat generated from a renewable energy resource that is captured and used to produce electricity or useful, measurable thermal or mechanical energy at a retail electric customer's facility is eligible to earn RECs. Thus, RSP shall not earn RECs for steam that bypasses the turbine generators or for waste heat that is used to pre-heat the feedwater for the boilers that are producing steam to be used to generate additional electricity. RSP shall annually file the information required by Commission Rule R8-66 on or before April 1 of each year. RSP will be required to participate in the NC-RETS REC tracking system ([www.ncrets.org](http://www.ncrets.org)) in order to facilitate the issuance of RECs.

IT IS, THEREFORE, ORDERED as follows:

1. That the planned expansion of RSP's steam production plant, adjacent to the Mallinckrodt industrial plant in northern Wake County and the Landfill, will not result in RSP or WGP becoming public utilities within the meaning of G.S. 62-3(23)(a), will not cause either of them to be a utility within the meaning of Commission Rule R6-2(a), and will not cause either of them to be "directly or indirectly ... furnishing ... public utility service" within the meaning of G.S. 62-110.1(a).

2. That the registration by RSP for its 2.8-MW landfill gas-fueled CHP facility located in Raleigh in Wake County, North Carolina as a new renewable energy facility shall be, and is hereby, accepted.

3. That RSP shall annually file the information required by Commission Rule R8-66 on or before April 1 of each year.

ISSUED BY ORDER OF THE COMMISSION.

This the 5th day of July, 2011.

NORTH CAROLINA UTILITIES COMMISSION



Patricia Swenson, Deputy Clerk

Commissioners Lorinzo L. Joyner and Susan W. Rabon did not participate.

Bh070511.01

**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

DOCKET NO. RET-4, SUB 5

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of  
Application of FLS YK Farm, LLC, for            ) ORDER ACCEPTING REGISTRATION  
Registration of a New Renewable                ) OF NEW RENEWABLE ENERGY  
Energy Facility                                        ) FACILITY

BY THE COMMISSION: On June 28, 2010, FLS YK Farm, LLC (FLS), filed a registration statement pursuant to Commission Rule R8-66 for a new renewable energy facility located in Jacksonville in Onslow County, North Carolina. In its registration statement and in its February 4, 2011, and April 4, 2011, responses to the Public Staff's two data requests, FLS stated that its solar thermal facility, Tarawa Terrace Group 4, consists of solar thermal systems installed at the U.S. Marine Corps Camp Lejeune on 108 residences bounded by Bougainville Drive, Saipan Drive, and Tarawa Boulevard. FLS further stated that each of the individual solar thermal systems on the 108 residences would be identical in nature, consisting of a single roof-mounted AE-40 collector, variable speed pump, expansion tank, and thermal storage tank. FLS stated that the individual solar thermal systems were expected to become operational on or before June 30, 2010. Finally, FLS requested that it be allowed to install meters on a representative sample of the 108 individual systems and that the metered data be allowed to be extrapolated to the remaining systems such that the entire facility be considered a metered solar thermal facility for purposes of G.S. 62-133.8(d).

The filing included certified attestations that: 1) the facility is in substantial compliance with all federal and state laws, regulations, and rules for the protection of the environment and conservation of natural resources; 2) the facility will be operated as a new renewable energy facility; 3) FLS will not remarket or otherwise resell any renewable energy certificates (RECs) sold to an electric power supplier to comply with G.S. 62-133.8; and 4) FLS will consent to the auditing of its books and records by the Public Staff insofar as those records relate to transactions with North Carolina electric power suppliers.

In its responses to the Public Staff's two data requests, FLS addressed the issues raised by the Public Staff regarding the proposed sampling methodology. FLS stated, in relevant part, that it had surveyed the systems and developed a representative sample, taking into account variations in slope, orientation, azimuth, mounting configuration and occupancy. First, all of the systems installed are identical in nature. Second, all of the systems were installed on homes of similar size with the same slope and minimal variations in azimuth. Third, no systems were installed in areas

where shading presented an impact.<sup>1</sup> Fourth, the occupancy level for the residences with solar thermal systems is greater than 95%. Lastly, the solar thermal systems were sized such that all of the hot water generated by the systems each day would be expected to be consumed. Given these facts, FLS concluded that metering of two facilities for each of the three system configurations is statistically sufficient to accurately determine the total solar thermal production and usage of all of the systems that are part of the proposed facility.

On May 23, 2011, the Public Staff filed the recommendation required by Commission Rule R8-66(e) stating that FLS's registration statement as a new renewable energy facility should be considered to be complete. The Public Staff stated that FLS had been responsive to and had addressed all of the Public Staff's concerns. The Public Staff further stated that it is satisfied that FLS's proposed sample metering of a representative sample of each variation of roof pitch, orientation, and system configuration will provide sufficient and accurate data that can be used to determine the number of solar RECs generated by the solar thermal systems in this housing area and that it believes that these solar RECs will meet the requirements of G.S. 62-133.8(d). No other party made a filing with respect to these issues.

Based upon the foregoing and the entire record in this proceeding, the Commission finds good cause to accept registration of FLS's metered solar thermal facility as a new renewable energy facility. In order for the RECs associated with a solar thermal facility to be eligible to meet the solar set-aside requirement of G.S. 62-133.8(d), the facility must be a metered solar thermal facility. Given the specific facts of this case, the Commission concludes that the sampling methodology proposed by FLS is appropriate and that the entire 108-panel solar thermal facility should be considered to be metered. Nothing in this Order shall set any precedent in any other docket; approval of sampling with regard to other solar thermal facilities will be considered on a case-by-case basis. FLS shall annually file the information required by Commission Rule R8-66 on or before April 1 of each year. FLS will be required to participate in the NC-RETS REC tracking system (<http://www.ncrets.org>) in order to facilitate the issuance of RECs.

IT IS, THEREFORE, ORDERED as follows:

1. That the registration by FLS for its metered solar thermal facility, Tarawa Terrace Group 4, located in Jacksonville in Onslow County, North Carolina as a new renewable energy facility shall be, and is hereby, accepted.

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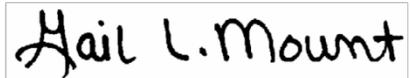
<sup>1</sup> FLS stated that it would perform routine annual inspections to address any environmental changes due to tree growth, construction and usage as a part of its maintenance agreement.

2. That FLS shall annually file the information required by Commission Rule R8-66 on or before April 1 of each year.

ISSUED BY ORDER OF THE COMMISSION.

This the 15<sup>th</sup> day of August, 2011.

NORTH CAROLINA UTILITIES COMMISSION

A rectangular box containing a handwritten signature in black ink that reads "Gail L. Mount".

Gail L. Mount, Deputy Clerk

k2081511.01

**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

DOCKET NO. RET-8, SUB 12

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of  
Application of FLS Owner II, LLC, for                    ) ORDER ACCEPTING REGISTRATION  
Registration of a New Renewable                        ) OF NEW RENEWABLE ENERGY  
Energy Facility    ) FACILITY

BY THE COMMISSION: On February 11, 2011, FLS Owner II, LLC (FLS), filed a registration statement pursuant to Commission Rule R8-66 for a new renewable energy facility located in Jacksonville in Onslow County, North Carolina. In its registration statement FLS stated that its solar thermal facility, Midway Park, consists of solar thermal systems installed at the U.S. Marine Corps Camp Lejeune on 405 residences along both sides of Butler Drive N.. FLS stated that the individual solar thermal systems were expected to become operational on or before December, 2011.

The filing included certified attestations that: 1) the facility is in substantial compliance with all federal and state laws, regulations, and rules for the protection of the environment and conservation of natural resources; 2) the facility will be operated as a new renewable energy facility; 3) FLS will not remarket or otherwise resell any renewable energy certificates (RECs) sold to an electric power supplier to comply with G.S. 62-133.8; and 4) FLS will consent to the auditing of its books and records by the Public Staff insofar as those records relate to transactions with North Carolina electric power suppliers.

On May 23, 2011, the Public Staff filed the recommendation required by Commission Rule R8-66(e) stating that FLS's registration statements as a new renewable energy facility should be considered to be complete.<sup>1</sup> In its recommendation, the Public Staff stated that FLS intends to meter only five percent (5%) of the 405 systems and that the metered data would be extrapolated to the remaining systems such that the entire facility would be considered to be a metered solar thermal facility for purposes of G.S. 62-133.8(d). In its recommendation, the Public Staff incorporated as applicable to this facility FLS's February 4, 2011, and April 4, 2011, responses to the Public Staff's data requests in Docket No. RET-4, Sub 5.

In its responses to the Public Staff's data requests, FLS addressed the issues raised by the Public Staff regarding the proposed sampling methodology. FLS stated, in relevant part, that it had surveyed the systems and developed a representative sample, taking into account variations in slope, orientation, azimuth, mounting configuration and

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<sup>1</sup> The Public Staff's recommendation encompasses all of the new renewable energy facilities for which registration is being sought in Docket Nos. RET-4, Sub 5; RET-8, Sub 12; RET-8, Sub 13; and RET-8, Sub 14.

occupancy. FLS further stated that: (1) all of the systems installed were identical in nature; (2) all of the systems were installed on homes of similar size with the same slope and minimal variations in azimuth; (3) no systems were installed in areas where shading presented an impact; (4) the occupancy level for the residences with solar thermal systems were greater than 95%; and (5) the solar thermal systems were sized such that all of the hot water generated by the systems each day would be expected to be consumed. Given these facts, FLS concluded that metering of the sample systems were statistically sufficient to accurately determine the total solar thermal production and usage of all of the systems that are part of the proposed facility.

The Public Staff stated that FLS had been responsive to and had addressed all of its concerns. The Public Staff further stated that it is satisfied that FLS's proposed sample metering of a representative sample of each variation of roof pitch, orientation, and system configuration will provide sufficient and accurate data that can be used to determine the number of solar RECs generated by the solar thermal systems in this housing area and that it believes that these solar RECs will meet the requirements of G.S. 62-133.8(d). No other party made a filing with respect to these issues.

Based upon the foregoing and the entire record in this proceeding, the Commission finds good cause to accept registration of FLS's metered solar thermal facility as a new renewable energy facility. In order for the RECs associated with a solar thermal facility to be eligible to meet the solar set-aside requirement of G.S. 62-133.8(d), the facility must be a metered solar thermal facility. Given the specific facts of this case, the Commission concludes that the sampling methodology proposed by FLS is appropriate and that the entire 405-panel solar thermal facility should be considered to be metered. Nothing in this Order shall set any precedent in any other docket; approval of sampling with regard to other solar thermal facilities will be considered on a case-by-case basis. FLS shall annually file the information required by Commission Rule R8-66 on or before April 1 of each year. FLS will be required to participate in the NC-RETS REC tracking system (<http://www.ncrets.org>) in order to facilitate the issuance of RECs.

IT IS, THEREFORE, ORDERED as follows:

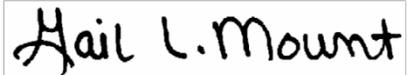
1. That the registration by FLS for its metered solar thermal facility, Midway Park, located in Jacksonville in Onslow County, North Carolina as a new renewable energy facility shall be, and is hereby, accepted.

2. That FLS shall annually file the information required by Commission Rule R8-66 on or before April 1 of each year.

ISSUED BY ORDER OF THE COMMISSION.

This the 15<sup>th</sup> day of August, 2011.

NORTH CAROLINA UTILITIES COMMISSION

A rectangular box containing a handwritten signature in black ink that reads "Gail L. Mount".

Gail L. Mount, Deputy Clerk

k2081511.02

**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

DOCKET NO. RET-8, SUB 13

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of  
Application of FLS Owner II, LLC, for                    ) ORDER ACCEPTING REGISTRATION  
Registration of a New Renewable                        ) OF NEW RENEWABLE ENERGY  
Energy Facility    ) FACILITY

BY THE COMMISSION: On February 11, 2011, FLS Owner II, LLC (FLS), filed a registration statement pursuant to Commission Rule R8-66 for a new renewable energy facility located in Jacksonville in Onslow County, North Carolina. In its registration statement FLS stated that its solar thermal facility, Terawa Terrace II, consists of solar thermal systems installed at the U.S. Marine Corps Camp Lejeune on 450 residences bounded by Hagaru Drive, Chosin Circle, and Hungnam Place. FLS stated that the individual solar thermal systems were expected to become operational on or before June 30, 2011.

The filing included certified attestations that: 1) the facility is in substantial compliance with all federal and state laws, regulations, and rules for the protection of the environment and conservation of natural resources; 2) the facility will be operated as a new renewable energy facility; 3) FLS will not remarket or otherwise resell any renewable energy certificates (RECs) sold to an electric power supplier to comply with G.S. 62-133.8; and 4) FLS will consent to the auditing of its books and records by the Public Staff insofar as those records relate to transactions with North Carolina electric power suppliers.

On May 23, 2011, the Public Staff filed the recommendation required by Commission Rule R8-66(e) stating that FLS's registration statements as a new renewable energy facility should be considered to be complete.<sup>1</sup> In its recommendation, the Public Staff stated that FLS intends to meter only five percent (5%) of the 450 systems and that the metered data would be extrapolated to the remaining systems such that the entire facility would be considered to be a metered solar thermal facility for purposes of G.S. 62-133.8(d). In its recommendation, the Public Staff incorporated as applicable to this facility FLS's February 4, 2011, and April 4, 2011, responses to the Public Staff's data requests in Docket No. RET-4, Sub 5.

In its responses to the Public Staff's data requests, FLS addressed the issues raised by the Public Staff regarding the proposed sampling methodology. FLS stated, in relevant part, that it had surveyed the systems and developed a representative sample,

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<sup>1</sup> The Public Staff's recommendation encompasses all of the new renewable energy facilities for which registration is being sought in Docket Nos. RET-4, Sub 5; RET-8, Sub 12; RET-8, Sub 13; and RET-8, Sub 14.

taking into account variations in slope, orientation, azimuth, mounting configuration and occupancy. FLS further stated that: (1) all of the systems installed were identical in nature; (2) all of the systems were installed on homes of similar size with the same slope and minimal variations in azimuth; (3) no systems were installed in areas where shading presented an impact; (4) the occupancy level for the residences with solar thermal systems were greater than 95%; and (5) the solar thermal systems were sized such that all of the hot water generated by the systems each day would be expected to be consumed. Given these facts, FLS concluded that metering of the sample systems were statistically sufficient to accurately determine the total solar thermal production and usage of all of the systems that are part of the proposed facility.

The Public Staff stated that FLS had been responsive to and had addressed all of its concerns. The Public Staff further stated that it is satisfied that FLS's proposed sample metering of a representative sample of each variation of roof pitch, orientation, and system configuration will provide sufficient and accurate data that can be used to determine the number of solar RECs generated by the solar thermal systems in this housing area and that it believes that these solar RECs will meet the requirements of G.S. 62-133.8(d). No other party made a filing with respect to these issues.

Based upon the foregoing and the entire record in this proceeding, the Commission finds good cause to accept registration of FLS's metered solar thermal facility as a new renewable energy facility. In order for the RECs associated with a solar thermal facility to be eligible to meet the solar set-aside requirement of G.S. 62-133.8(d), the facility must be a metered solar thermal facility. Given the specific facts of this case, the Commission concludes that the sampling methodology proposed by FLS is appropriate and that the entire 450-panel solar thermal facility should be considered to be metered. Nothing in this Order shall set any precedent in any other docket; approval of sampling with regard to other solar thermal facilities will be considered on a case-by-case basis. FLS shall annually file the information required by Commission Rule R8-66 on or before April 1 of each year. FLS will be required to participate in the NC-RETS REC tracking system (<http://www.ncrets.org>) in order to facilitate the issuance of RECs.

IT IS, THEREFORE, ORDERED as follows:

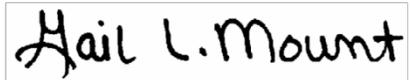
1. That the registration by FLS for its metered solar thermal facility, Terawa Terrace II, located in Jacksonville in Onslow County, North Carolina as a new renewable energy facility shall be, and is hereby, accepted.

2. That FLS shall annually file the information required by Commission Rule R8-66 on or before April 1 of each year.

ISSUED BY ORDER OF THE COMMISSION.

This the 15<sup>th</sup> day of August, 2011.

NORTH CAROLINA UTILITIES COMMISSION

A rectangular box containing a handwritten signature in black ink that reads "Gail L. Mount".

Gail L. Mount, Deputy Clerk

k2081511.03

**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

DOCKET NO. RET-8, SUB 14

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of  
Application of FLS Owner II, LLC, for                    ) ORDER ACCEPTING REGISTRATION  
Registration of a New Renewable                        ) OF NEW RENEWABLE ENERGY  
Energy Facility    ) FACILITY

BY THE COMMISSION: On February 11, 2011, FLS Owner II, LLC (FLS), filed a registration statement pursuant to Commission Rule R8-66 for a new renewable energy facility located in Jacksonville in Onslow County, North Carolina. In its registration statement FLS stated that its solar thermal facility, Terawa Terrace VI, consists of solar thermal systems installed at the U.S. Marine Corps Camp Lejeune on 166 residences bounded by Bougainville Drive, Guam Drive, and Tarawa Boulevard. FLS stated that the individual solar thermal systems were expected to become operational on or before December, 2011.

The filing included certified attestations that: 1) the facility is in substantial compliance with all federal and state laws, regulations, and rules for the protection of the environment and conservation of natural resources; 2) the facility will be operated as a new renewable energy facility; 3) FLS will not remarket or otherwise resell any renewable energy certificates (RECs) sold to an electric power supplier to comply with G.S. 62-133.8; and 4) FLS will consent to the auditing of its books and records by the Public Staff insofar as those records relate to transactions with North Carolina electric power suppliers.

On May 23, 2011, the Public Staff filed the recommendation required by Commission Rule R8-66(e) stating that FLS's registration statements as a new renewable energy facility should be considered to be complete.<sup>1</sup> In its recommendation, the Public Staff stated that FLS intends to meter only five percent (5%) of the 166 systems and that the metered data would be extrapolated to the remaining systems such that the entire facility would be considered to be a metered solar thermal facility for purposes of G.S. 62-133.8(d). In its recommendation, the Public Staff incorporated as applicable to this facility FLS's February 4, 2011, and April 4, 2011, responses to the Public Staff's data requests in Docket No. RET-4, Sub 5.

In its responses to the Public Staff's data requests, FLS addressed the issues raised by the Public Staff regarding the proposed sampling methodology. FLS stated, in relevant part, that it had surveyed the systems and developed a representative sample,

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<sup>1</sup> The Public Staff's recommendation encompasses all of the new renewable energy facilities for which registration is being sought in Docket Nos. RET-4, Sub 5; RET-8, Sub 12; RET-8, Sub 13; and RET-8, Sub 14.

taking into account variations in slope, orientation, azimuth, mounting configuration and occupancy. FLS further stated that: (1) all of the systems installed were identical in nature; (2) all of the systems were installed on homes of similar size with the same slope and minimal variations in azimuth; (3) no systems were installed in areas where shading presented an impact; (4) the occupancy level for the residences with solar thermal systems were greater than 95%; and (5) the solar thermal systems were sized such that all of the hot water generated by the systems each day would be expected to be consumed. Given these facts, FLS concluded that metering of the sample systems were statistically sufficient to accurately determine the total solar thermal production and usage of all of the systems that are part of the proposed facility.

The Public Staff stated that FLS had been responsive to and had addressed all of its concerns. The Public Staff further stated that it is satisfied that FLS's proposed sample metering of a representative sample of each variation of roof pitch, orientation, and system configuration will provide sufficient and accurate data that can be used to determine the number of solar RECs generated by the solar thermal systems in this housing area and that it believes that these solar RECs will meet the requirements of G.S. 62-133.8(d). No other party made a filing with respect to these issues.

Based upon the foregoing and the entire record in this proceeding, the Commission finds good cause to accept registration of FLS's metered solar thermal facility as a new renewable energy facility. In order for the RECs associated with a solar thermal facility to be eligible to meet the solar set-aside requirement of G.S. 62-133.8(d), the facility must be a metered solar thermal facility. Given the specific facts of this case, the Commission concludes that the sampling methodology proposed by FLS is appropriate and that the entire 166-panel solar thermal facility should be considered to be metered. Nothing in this Order shall set any precedent in any other docket; approval of sampling with regard to other solar thermal facilities will be considered on a case-by-case basis. FLS shall annually file the information required by Commission Rule R8-66 on or before April 1 of each year. FLS will be required to participate in the NC-RETS REC tracking system (<http://www.ncrets.org>) in order to facilitate the issuance of RECs.

IT IS, THEREFORE, ORDERED as follows:

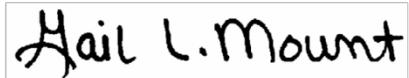
1. That the registration by FLS for its metered solar thermal facility, Terawa Terrace VI, located in Jacksonville in Onslow County, North Carolina as a new renewable energy facility shall be, and is hereby, accepted.

2. That FLS shall annually file the information required by Commission Rule R8-66 on or before April 1 of each year.

ISSUED BY ORDER OF THE COMMISSION.

This the 15<sup>th</sup> day of August, 2011.

NORTH CAROLINA UTILITIES COMMISSION

A rectangular box containing a handwritten signature in black ink that reads "Gail L. Mount".

Gail L. Mount, Deputy Clerk

k2081511.04

# **APPENDIX 3**

**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

DOCKET NO. E-100, SUB 113  
DOCKET NO. E-100, SUB 121

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-100, SUB 113	)	
	)	
In the Matter of	)	
Rulemaking Proceeding to Implement	)	
Session Law 2007-397	)	
	)	ORDER EXTENDING DEADLINE FOR
DOCKET NO. E-100, SUB 121	)	THE ISSUANCE OF HISTORIC RECS
	)	
In the Matter of	)	
Implementing a Tracking System for	)	
Renewable Energy Certificates Pursuant	)	
to Session Law 2007-397	)	

BY THE COMMISSION: In its August 3, 2010 Order issued in the above-captioned dockets, the Commission concluded that its rules should encourage the issuance of renewable energy certificates (RECs) in a tracking system as soon as possible following the production of the energy associated with the RECs. The Commission, therefore, ordered that, as of January 1, 2011, renewable energy facilities and new renewable energy facilities that participate in NC-RETS are only eligible for historic REC issuances for energy production going back two years.

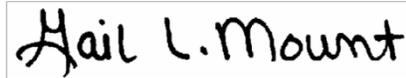
To ensure that all facilities have an adequate opportunity to register with the Commission and with NC-RETS and to have their historic energy production data dating back to January 1, 2008, reported to NC-RETS, the Commission finds good cause to extend the deadline until June 1, 2011, for REC issuances based upon historic energy production data. As noted in the Commission's earlier Order, this decision only affects the issuance of RECs for facilities participating in NC-RETS, and will have no effect on the issuance of RECs earned by facilities participating in other registries; such facilities will have to abide by their registries' rules regarding the eligibility of historic production data for REC issuance.

IT IS, THEREFORE, ORDERED that, on and after June 1, 2011, renewable energy facilities and new renewable energy facilities that participate in NC-RETS may have RECs issued for no more than two years' worth of historic energy production data.

ISSUED BY ORDER OF THE COMMISSION.

This the 10<sup>th</sup> day of December, 2010.

NORTH CAROLINA UTILITIES COMMISSION

A rectangular box containing a handwritten signature in black ink that reads "Gail L. Mount".

Gail L. Mount, Deputy Clerk

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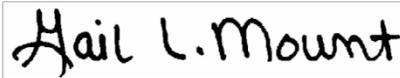


numbers 00026804 through 00176803) that it purchased (via a third party) from Capricorn Ridge and that were retired on its behalf prior to the development of NC-RETS is granted.

ISSUED BY ORDER OF THE COMMISSION.

This the 25<sup>th</sup> day of March, 2011.

NORTH CAROLINA UTILITIES COMMISSION

A rectangular box containing a handwritten signature in black ink that reads "Gail L. Mount".

Gail L. Mount, Deputy Clerk

Sw032411.01

**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

DOCKET NO. E-100, SUB 130  
DOCKET NO. EMP-31, SUB 0  
DOCKET NO. EMP-40, SUB 0  
DOCKET NO. SP-585, SUB 0  
DOCKET NO. SP-715, SUB 1  
DOCKET NO. SP-758, SUB 0  
DOCKET NO. SP-758, SUB 1  
DOCKET NO. SP-758, SUB 2  
DOCKET NO. SP-758, SUB 3  
DOCKET NO. SP-758, SUB 4  
DOCKET NO. SP-758, SUB 5  
DOCKET NO. SP-758, SUB 6  
DOCKET NO. SP-758, SUB 7  
DOCKET NO. SP-758, SUB 8  
DOCKET NO. SP-760, SUB 0  
DOCKET NO. SP-760, SUB 1  
DOCKET NO. SP-760, SUB 2  
DOCKET NO. SP-760, SUB 3  
DOCKET NO. SP-830, SUB 0

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-100, SUB 130	)	
	)	
In the Matter of	)	
Revocation of Registrations of Renewable	)	
Energy Facilities and New Renewable	)	
Energy Facilities Pursuant to	)	
Rule R8-66(f) – 2011	)	
	)	
DOCKET NO. EMP-31, SUB 0	)	ORDER REVOKING REGISTRATION
	)	OF RENEWABLE ENERGY
In the Matter of	)	FACILITIES AND NEW RENEWABLE
Registration Statement for a 120 MW	)	ENERGY FACILITIES
Wind Turbine Facility	)	
	)	
	)	
DOCKET NO. EMP-40, SUB 0	)	
	)	
In the Matter of	)	
Registration Statement for a 160 MW	)	
Wind Turbine Facility	)	

DOCKET NO. SP-585, SUB 0 )  
 )  
 In the Matter of )  
 Report of Proposed Construction and )  
 Registration Statement )  
 )  
 DOCKET NO. SP-715, SUB 1 )  
 )  
 In the Matter of )  
 Registration Statement for a Gas to )  
 Energy Project )  
 )  
 DOCKET NO. SP-758, SUB 0 )  
 )  
 In the Matter of )  
 Registration Statement for the SJUSD )  
 Bret Harte Solar Facility Generating )  
 0.3927 MW )  
 )  
 DOCKET NO. SP-758, SUB 1 )  
 )  
 In the Matter of )  
 Registration Statement for the SJUSD )  
 Allen Elementary at Steinbeck Solar )  
 Facility Generating 0.4221 MW )  
 )  
 DOCKET NO. SP-758, SUB 2 )  
 )  
 In the Matter of )  
 Registration Statement for the SJUSD )  
 Burnett Solar Facility Generating 0.147 )  
 MW )  
 )  
 DOCKET NO. SP-758, SUB 3 )  
 )  
 In the Matter of )  
 Registration Statement for the SJUSD )  
 John Muir Solar Facility Generating )  
 0.4095 MW )  
 )  
 DOCKET NO. SP-758, SUB 4 )  
 )  
 In the Matter of )  
 Registration Statement for the SJUSD )  
 Lincoln Solar Facility Generating )  
 0.4977 MW )

ORDER REVOKING REGISTRATION  
 OF RENEWABLE ENERGY  
 FACILITIES AND NEW RENEWABLE  
 ENERGY FACILITIES

DOCKET NO. SP-758, SUB 5 )  
 )  
 In the Matter of )  
 Registration Statement for the SJUSD )  
 Corp Yard Solar Facility Generating )  
 0.1722 MW )  
 )  
 DOCKET NO. SP-758, SUB 6 )  
 )  
 In the Matter of )  
 Registration Statement for the SJUSD )  
 Willow Glen Solar Facility Generating )  
 0.8274 MW )  
 )  
 DOCKET NO. SP-758, SUB 7 )  
 )  
 In the Matter of )  
 Registration Statement for the SJUSD )  
 Central Kitchen Solar Facility Generating )  
 0.3066 MW )  
 )  
 DOCKET NO. SP-758, SUB 8 )  
 )  
 In the Matter of )  
 Registration Statement for the SJUSD )  
 Castillero Solar Facility Generating )  
 0.231 MW )  
 )  
 DOCKET NO. SP-760, SUB 0 )  
 )  
 In the Matter of )  
 Registration Statement for the SJUSD )  
 Leland Solar Facility Generating )  
 0.4872 MW )  
 )  
 DOCKET NO. SP-760, SUB 1 )  
 )  
 In the Matter of )  
 Registration Statement for the SJUSD )  
 Gunderson Solar Facility Generating )  
 0.6615 MW )

ORDER REVOKING REGISTRATION  
 OF RENEWABLE ENERGY  
 FACILITIES AND NEW RENEWABLE  
 ENERGY FACILITIES

DOCKET NO. SP-760, SUB 2	)	
	)	
In the Matter of	)	
Registration Statement for the SJUSD SJ	)	
Academy Solar Facility Generating	)	
0.420 MW	)	
	)	
DOCKET NO. SP-760, SUB 3	)	
	)	ORDER REVOKING REGISTRATION
In the Matter of	)	OF RENEWABLE ENERGY
Registration Statement for the SJUSD	)	FACILITIES AND NEW RENEWABLE
Pioneer Solar Facility Generating	)	ENERGY FACILITIES
0.4389 MW	)	
	)	
DOCKET NO. SP-830, SUB 0	)	
	)	
In the Matter of	)	
Report of Proposed Construction and	)	
Registration Statement	)	

BY THE COMMISSION: On April 26, 2011, the Commission issued an Order giving notice of its intent to revoke the registrations of 63 renewable energy facilities and new renewable energy facilities because their owners had not completed or filed the annual certifications required each April 1 as detailed in Commission Rule R8-66(b). According to records maintained in the North Carolina Renewable Energy Tracking System (NC-RETS) and the Commission’s records, the owners of 20 renewable energy facilities and new renewable energy facilities did not complete their annual certifications on or before June 1, 2011, as required in the Commission’s April 26, 2011 Order. It has come to the Commission’s attention that the owners of two of the facilities did not receive the April 26, 2011 Order due to an administrative error.

The Commission, therefore, finds good cause to revoke the registrations for the 18 facilities listed in Appendix A effective June 1, 2011, and to establish a new deadline for filing the annual certifications for the two facilities that did not receive service of the April 26, 2011 Order.

IT IS, THEREFORE, ORDERED as follows:

1. That the registrations previously approved by the Commission for the 18 facilities listed in Appendix A shall be, and hereby are, revoked effective June 1, 2011.

2. That the NC-RETS Administrator shall not allow the owners of the facilities listed in Appendix A to establish those facilities as “projects” in NC-RETS, nor shall the NC-RETS Administrator allow any NC-RETS account holder to import from the

18 facilities listed in Appendix A renewable energy certificates (RECs) that are dated June 2011 or later.

3. That any RECs dated June 2011 or later earned by one of the facilities whose registration was revoked pursuant to this Order are ineligible to be used by an electric power supplier for compliance with the Renewable Energy and Energy Efficiency Portfolio Standard.

4. That, in the future, should the owner of a facility whose registration is revoked pursuant to this Order wish to have the energy output from its facility become eligible for compliance with the Renewable Energy and Energy Efficiency Portfolio Standard, the owner must again register the facility with the Commission pursuant to Rule R8-66.

5. That the Chief Clerk shall serve this Order, as well as the April 26, 2011 Order in this docket, on Solar Energy Initiatives, Inc., and Nash Solar, LLC, via certified mail, return receipt requested.

6. That Solar Energy Initiatives, Inc., and Nash Solar, LLC, shall complete their annual certifications on or before July 1, 2011, or be subject to revocation of their registrations.

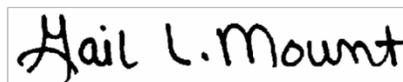
7. That the Administrator of NC-RETS shall post a copy of this Order on the home page of the NC-RETS web site.

8. That the Chief Clerk shall serve a copy of this Order on all of the parties in Docket No. E-100, Sub 113.

ISSUED BY ORDER OF THE COMMISSION.

This the 7<sup>th</sup> day of June, 2011.

NORTH CAROLINA UTILITIES COMMISSION

A rectangular box containing a handwritten signature in black ink that reads "Gail L. Mount".

Gail L. Mount, Deputy Clerk

kh060711.01

**Renewable Energy Facilities and New Renewable Energy Facilities Whose  
Registrations are Revoked Effective June 1, 2011  
Docket No. E-100, Sub 130**

<b>Docket #</b>	<b>Sub</b>	<b>Owner</b>	<b>Facility Name</b>	<b>State</b>
EMP-31	0	Barton Chapel Wind, LLC	Barton Chapel Wind Farm	TX
EMP-40	0	Barton Windpower, LLC	Barton Wind Farm	IA
SP-585	0	North Hills Progress Solar 1, LLC	AGT Retail Solar Plant 1	NC
SP-715	1	Buncombe County	Buncombe Co. Facility	NC
SP-758	0	BAL Solar II, LLC	SJUSD Bret Harte Solar	CA
SP-758	1	BAL Solar II, LLC	SJUSD Allen Elementary at Steinbeck Solar	CA
SP-758	2	BAL Solar II, LLC	SJUSD Burnett Solar	CA
SP-758	3	BAL Solar II, LLC	SJUSD John Muir Solar	CA
SP-758	4	BAL Solar II, LLC	SJUSD Lincoln Solar	CA
SP-758	5	BAL Solar II, LLC	SJUSD Corp Yard Solar	CA
SP-758	6	BAL Solar II, LLC	SJUSD Willow Glen Solar	CA
SP-758	7	BAL Solar II, LLC	SJUSD Central Kitchen Solar	CA
SP-758	8	BAL Solar II, LLC	SJUSD Castillero	CA
SP-760	0	BAL Solar I, LLC	SJUSD Leland Solar	CA
SP-760	1	BAL Solar I, LLC	SJUSD Gunderson Solar	CA
SP-760	2	BAL Solar I, LLC	SJUSD SJ Academy Solar	CA
SP-760	3	BAL Solar I, LLC	SJUSD Pioneer Solar	CA
SP-830	0	Chris Larsen	Buncombe Co. Facility	NC

**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

DOCKET NO. E-100, SUB 130  
DOCKET NO. SP-696, SUB 0  
DOCKET NO. SP-730, SUB 0

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-100, SUB 130	)	
	)	
In the Matter of	)	
Revocation of Registrations of Renewable	)	
Energy Facilities and New Renewable	)	
Energy Facilities Pursuant to	)	
Rule R8-66(f) – 2011	)	
	)	
DOCKET NO. SP-696, SUB 0	)	
	)	
In the Matter of	)	ORDER REVOKING REGISTRATION
Application of Solar Energy Initiatives,	)	OF NEW RENEWABLE ENERGY
Inc., for Registration of New Renewable	)	FACILITIES
Energy Facility	)	
	)	
DOCKET NO. SP-730, SUB 0	)	
	)	
In the Matter of	)	
Application of Nash Solar, LLC, for	)	
Registration of New Renewable Energy	)	
Facility	)	

BY THE COMMISSION: On April 26, 2011, the Commission issued an Order in Docket No. E-100, Sub 130 giving notice of intent to revoke the registration of 63 renewable energy facilities and new renewable energy facilities because their owners had not completed or filed the annual certifications required each April 1 as detailed in Commission Rule R8-66(b). That Order required the Chief Clerk to serve a copy of that Order on the owners of each of the 63 facilities, including Nash Solar, LLC, and Solar Energy Initiatives, Inc.

On June 7, 2011, the Commission issued an Order Revoking Registration of Renewable Energy Facilities and New Renewable Energy Facilities in that same docket. In that Order, the Commission noted that, due to administrative error, its April 26, 2011 Order had not been served on Nash Solar, LLC, and Solar Energy Initiatives, Inc. Therefore, the Commission set a new deadline of July 1, 2011, for those two facility owners to file their annual certifications. The Commission also ordered the Chief Clerk

to serve the June 7, 2011 Order on Nash Solar, LLC, and Solar Energy Initiatives, Inc., via certified mail, return receipt requested.

According to the Commission's records, Nash Solar, LLC, and Solar Energy Initiatives, Inc., received the June 7, 2011 Order, but have not filed their required annual certifications. Therefore, the Commission finds good cause to revoke the registrations for their facilities effective July 1, 2011.

IT IS, THEREFORE, ORDERED as follows:

1. That the registrations previously approved by the Commission for Nash Solar, LLC, for a 219.6-kW solar photovoltaic facility in Rocky Mount, North Carolina, and for Solar Energy Initiatives, Inc., for a 249-kW solar photovoltaic facility in Kingstree, South Carolina, shall be, and are hereby, revoked effective July 1, 2011.

2. That the NC-RETS Administrator shall not allow Nash Solar, LLC, or Solar Energy Initiatives, Inc., to establish those facilities as "projects" in NC-RETS, nor shall the NC-RETS Administrator allow any NC-RETS account holder to import from those two facilities any renewable energy certificates (RECs) that are dated July 2011 or later.

3. That any RECs dated July 2011 or later earned by one of those facilities are ineligible to be used by an electric power supplier for compliance with the Renewable Energy and Energy Efficiency Portfolio Standard.

4. That, in the future, should Nash Solar, LLC, or Solar Energy Initiatives, Inc., wish to have the energy output from its facility become eligible for compliance with the Renewable Energy and Energy Efficiency Portfolio Standard, they must again register the facility with the Commission pursuant to Rule R8-66.

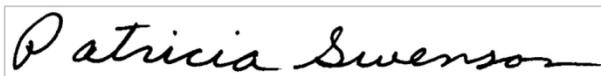
5. That the Administrator of NC-RETS shall post a copy of this Order on the home page of the NC-RETS web site.

6. That the Chief Clerk shall serve a copy of this Order on all of the parties in Docket No. E-100, Sub 113.

ISSUED BY ORDER OF THE COMMISSION.

This the 6th day of July, 2011.

NORTH CAROLINA UTILITIES COMMISSION



Patricia Swenson, Deputy Clerk



applies only to RECs initially issued by NC-RETS based on historical generation data provided to that tracking system. In this case, the RECs were issued by ERCOT and are being transferred to NC-RETS.

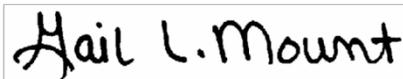
The Chairman further notes, however, that the Commission has now established a procedure for transferring RECs into NC-RETS from the ERCOT REC tracking system, as well as a number of other REC tracking systems, to ensure that such RECs are legitimate and that a credible audit trail links every REC back to its associated renewable energy output. This procedure should be followed in the future to avoid the necessity of additional requests for the transfer of previously retired RECs.

IT IS, THEREFORE, ORDERED that the request by Duke to transfer into NC-RETS from the ERCOT REC tracking system 250,000 RECs (issued as serial numbers 00000001 through 00123378, 00134357 through 00173378, 00180520 through 00265740, and 00265741 through 00268119) that Duke purchased (via a third party) from Capricorn Ridge and that were retired on Duke's behalf prior to the development of NC-RETS is granted.

ISSUED BY ORDER OF THE COMMISSION.

This the 26<sup>th</sup> day of August, 2011.

NORTH CAROLINA UTILITIES COMMISSION

A rectangular box containing a handwritten signature in black ink that reads "Gail L. Mount".

Gail L. Mount, Deputy Clerk



BY THE COMMISSION: On May 18, 2010, Carolina Power & Light Company, d/b/a Progress Energy Carolinas, Inc. (PEC), filed its annual Renewable Energy and Energy Efficiency Portfolio Standard (REPS) compliance report pursuant to Commission Rule R8-67(c) together with the supporting testimony of Jennifer S. Ellis. On June 4, 2010, PEC filed an application seeking an adjustment to its North Carolina retail rates and charges pursuant to G.S. 62-133.8(h) and Commission Rule R8-67, which require the Commission to conduct an annual proceeding for the purpose of determining whether a rider should be established to permit the recovery of the incremental costs incurred in order to comply with the REPS requirements, G.S. 62-133.8(b), (d), (e) and (f), and to true-up any under-recovery or over-recovery of compliance costs. PEC's application was accompanied by the prefiled testimony and exhibits of Ms. Ellis. In its application and prefiled testimony, PEC sought approval of a rider to recover its reasonable and prudent forecasted REPS costs and an experience modification factor (EMF).

On June 16, 2010, the Commission issued an Order Scheduling Hearing, Establishing Discovery Guidelines, and Requiring Public Notice in which the Commission set this matter for hearing; established deadlines for the submission of intervention petitions, intervenor direct testimony, and PEC's rebuttal testimony; required the provision of appropriate public notice; and mandated compliance with certain discovery guidelines.

Between June 14, 2010, and September 7, 2010, petitions to intervene were filed by the Carolina Utility Customers Association, Inc. (CUCA); ElectriCities of North Carolina, Inc.; GreenCo Solutions, Inc. (GreenCo); Green Energy Solutions NV, Inc.; North Carolina Municipal Power Agency 1; North Carolina Eastern Municipal Power Agency; and North Carolina Sustainable Energy Association (NCSEA). Each of these petitions to intervene was allowed by the Commission.

On June 9, 2010, Roy Cooper, Attorney General, filed a Notice of Intervention, which is recognized pursuant to G.S. 62-20. The intervention and participation of the Public Staff is recognized pursuant to G.S. 62-15(d) and Commission Rule R1-19(e).

On August 20, 2010, PEC filed the supplemental direct testimony and exhibits of witness Ellis. On September 9, 2010, the Public Staff filed the testimony of Jay B. Lucas, an engineer in the Public Staff's Electric Division, and the affidavit of Sonja R. Johnson, Staff Accountant in the Electric Section of the Public Staff's Accounting Division. On September 17, 2010, PEC filed the rebuttal testimony and exhibits of witness Ellis.

On September 14, 2010, PEC filed affidavits of publication indicating that public notice had been provided in accordance with the Commission's procedural order.

The matter came on for hearing as scheduled on September 22, 2010. PEC presented the testimony and exhibits of Ms. Ellis, and the Public Staff presented the testimony of Mr. Lucas. The affidavit of Ms. Johnson was also entered into the record.

On October 27, 2010, the Public Staff and PEC filed a joint proposed order. Also on October 27, 2010, NCSEA filed a post-hearing brief. On November 2, 2010, NCSEA filed a motion to file a supplemental submission in which it sought to have its "2010 North Carolina Renewable Energy & Energy Efficiency Industries Census" entered into the record in this proceeding. The Commission will deny NCSEA's motion as untimely.

Based upon the foregoing, the testimony and exhibits introduced at the hearing, and the Commission's record in this proceeding, the Commission now makes the following

#### FINDINGS OF FACT

1. PEC is duly organized as a public utility company under the laws of the State of North Carolina and is subject to the jurisdiction of this Commission. PEC is engaged in the business of generating, transmitting, distributing and selling electric power to the public in North Carolina. PEC is lawfully before this Commission based upon its application filed pursuant to G.S. 62-133.8 and Commission Rule R8-67.

2. Under G.S. 62-133.8(h), the "incremental costs" of compliance with the REPS requirement may be recovered through an annual REPS rider. The term "incremental costs," as defined in G.S. 62-133.8(h)(1), includes the costs of renewable energy purchases "that are in excess of the electric power supplier's avoided costs."

3. The test period, update period, and billing period for this proceeding are, respectively, the 12-month period ending March 31, 2010; the period from April 1 through July 31, 2010; and the 12-month period ending November 30, 2011.

4. Pursuant to Commission Rule R8-67(e)(5), PEC is permitted to recover through an experience modification factor (EMF) all reasonable and prudent incremental costs of REPS compliance incurred up to 30 days prior to the hearing in this proceeding and, therefore, may incorporate in its determination of its experienced over- or under-recovery of REPS incremental costs, those costs incurred through July 31 of each year.

5. Beginning in the year 2010, at least 0.02% of PEC's previous year's North Carolina retail energy sales must be supplied by a combination of new solar electric facilities and new metered solar thermal energy facilities. In 2012, this solar set-aside requirement increases to 0.07% of PEC's previous year's North Carolina retail sales. Also in 2012, PEC must generally meet 3% of its previous year's North Carolina retail electric sales by a combination of renewable energy and energy reductions due to the implementation of energy efficiency (EE) measures. PEC and the other electric power suppliers of North Carolina are required, in the aggregate, by G.S. 62-133.8 to procure a certain portion of their renewable energy requirements beginning in 2012 from electricity generated by poultry and swine waste.

6. PEC has agreed to provide REPS compliance services, including the procurement of renewable energy certificates (RECs), to certain wholesale entities. It is therefore necessary to allocate PEC's incremental costs of REPS compliance between

PEC's own retail customers and the customers of the wholesale entities. PEC has made this allocation on an energy basis, and this method of allocation is appropriate for use in this proceeding. It is appropriate that RECs paid for solely by PEC's retail customers be used solely for PEC's REPS compliance obligations.

7. PEC should be allowed to recover the \$22,500 grant it made to the Electric Power Research Institute (EPRI) to support a study of the air quality impacts of electric vehicle transportation as provided for in G.S. 62-133.8(h).

8. PEC's incremental costs for retail REPS compliance total \$6,934,617 for the test period and \$4,509,955 for the update period, for a total of \$11,444,572. Forecasted incremental costs for REPS compliance for the billing period total \$14,484,441.

9. PEC's recovery of incremental costs, through the REPS and REPS EMF riders, amounts to \$7,011,394 for the period August 2009-March 2010 and \$4,606,523 for the update period, for a total of \$11,617,917. This amount is \$173,344 more than PEC's incremental costs incurred during these two periods; consequently, PEC must refund \$173,344 with interest of \$23,113, for a total refund of \$196,457 through the REPS EMF rider during the billing period.

10. PEC's incremental costs for REPS compliance during the test period were reasonable and prudently incurred.

11. The number of customer accounts estimated to be assessed for payment of the REPS and REPS EMF riders is 1,105,854 in the residential class, 178,898 in the commercial class, and 1,979 in the industrial class.

12. PEC's proposed procedure for calculating the amount of the REPS riders for each customer class, based on the amount of incremental costs for each of the relevant periods and the estimated number of customer accounts in each class liable for payment of the riders, and its proposed monthly fixed rate per customer account billing methodology are appropriate.

13. The appropriate monthly amount of the REPS rider per customer account, excluding gross receipts tax and regulatory fee, to be collected during the rate period is \$0.57 for customer accounts in the residential class, \$2.84 for customer accounts in the commercial class, and \$28.35 for customer accounts in the industrial class.

14. The appropriate monthly amount of the REPS EMF rider per customer account, excluding gross receipts tax and regulatory fee, to be collected during the rate period is (\$0.01) for customer accounts in the residential class, (\$0.04) for customer accounts in the commercial class, and (\$0.39) for customer accounts in the industrial class.

15. The combined monthly REPS and REPS EMF rider charges to be collected during the billing period, adjusted to include gross receipts tax and the regulatory fee, are

\$0.58 for customer accounts in the residential class, \$2.90 for customer accounts in the commercial class, and \$28.93 for customer accounts in the industrial class. These charges are within the annual cost caps established by G.S. 62-133.8(h)(4).

16. Except as otherwise provided herein, PEC's 2009 REPS compliance report should be approved.

#### EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 1

This finding of fact is essentially informational, jurisdictional and procedural in nature and is not controversial.

#### EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 2-4

The evidence supporting these findings of fact is found in the testimony of PEC witness Ellis and the affidavit of Public Staff witness Johnson.

G.S. 62-133.8(h)(4) requires the Commission to allow an electric utility to recover all of its incremental, reasonable and prudent costs incurred to comply with G.S. 62-133.8 through an annual rider. G.S. 62-133.8(h)(1) provides that "incremental costs" means all reasonable and prudent costs incurred by an electric power supplier to comply with the REPS requirements that are in excess of the electric power supplier's avoided costs other than those cost recovered pursuant to G.S. 62-133.9.

Commission Rule R8-67(e) provides that the Commission shall schedule an annual public hearing to review an electric utility's REPS compliance costs. The Rule further provides that the annual rider hearing for each electric utility will be scheduled as soon as practicable after the hearing held by the Commission for such utility under Rule R8-55 (the fuel and fuel-related cost recovery rule). Pursuant to Rule R8-55, PEC's annual fuel and fuel-related cost hearing is to be held the third Tuesday of September of each year. Subsection (e) of Rule R8-67 further provides that the test period for each utility shall be the same as the test period for purposes of Rule R8-55. Rule R8-55 provides that PEC's test period is the twelve months ending March 31 of each year. Therefore, PEC proposed a test period for its REPS cost recovery proceeding of the twelve months ending March 31, 2010.

Commission Rule R8-67(e)(5) provides that, upon request of an electric utility, the Commission shall also incorporate in its determination of a utility's EMF its experienced over- or under-recovery of REPS costs up to 30 days prior to the hearing, provided that the reasonableness and prudence of these costs shall be subject to review in the utility's next annual REPS cost recovery hearing. Given that PEC's annual REPS cost recovery hearing is the third Tuesday of each September, PEC is entitled to incorporate in its determination of its under- or over-recovery of REPS costs those costs

incurred through July 31 of each year. This period, from April 1 through July 31, 2010, is referred to as the “update period.”<sup>1</sup>

Rule R8-67(e)(4) provides that the REPS and REPS EMF riders shall be in effect for a fixed period which “shall coincide, to the extent practical, with the recovery period for the cost of fuel and fuel-related cost rider established pursuant to Rule R8-55.” In its current fuel charge adjustment proceeding, Docket No. E-2, Sub 976, and in this proceeding, PEC proposed, without objection from any party, that its rate adjustments take effect on December 1, 2010, and remain in effect for a 12-month period. This period is referred to as the “billing period.”

The test period proposed by PEC was not challenged by any party, and the Commission concludes that the test period appropriate for use in this proceeding is the twelve months ending March 31, 2010, and that PEC is entitled to include in its experienced over- and under-recovery those REPS compliance costs incurred through July 31, 2010.

#### EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 5

The evidence supporting this finding of fact appears in PEC’s application, the testimony of PEC witness Ellis, and the requirements of G.S. 62-133.8. This finding of fact is essentially informational and is not controversial.

PEC witness Ellis explained that G.S. 62-133.8 requires PEC to procure at least 0.02% of its previous year’s North Carolina retail energy sales from solar energy beginning in the year 2010. PEC forecasts its solar requirement to be 6,278 megawatt-hours (MWh) in 2010 and 7,259 MWh in 2011. In 2012 the solar set-aside requirement increases to 0.07%. Also in 2012, PEC must generally meet 3% of its previous year’s North Carolina retail electric sales by a combination of renewable energy and energy reductions due to the implementation of EE measures. G.S. 62-133.8(e) and (f) require the electric power suppliers of North Carolina, in the aggregate, to procure a certain portion of the 3% REPS requirement from generation produced from swine and poultry waste. On March 31, 2010, the Commission issued an Order in Docket No. E-100, Sub 113, approving a pro rata mechanism of allocating the statewide aggregate swine and poultry waste set-aside requirements among the State’s electric power suppliers.

#### EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 6

The evidence supporting this finding of fact appears in the testimony and exhibits of PEC witness Ellis and the affidavit of Public Staff witness Johnson.

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<sup>1</sup> Because a true-up of incremental REPS costs for April 1, 2009, through July 31, 2009, was approved in PEC’s 2009 REPS cost recovery proceeding, Docket No. E-2, Sub 948, these months have been excluded from the REPS EMF rider calculation, resulting in an effective measurement period for the true-up of August 2009 through July 2010. (See Affidavit of Sonja R. Johnson.)

PEC witness Ellis stated that, pursuant to G.S. 62-133.8(c)(2)(e), PEC has agreed to procure RECs beginning December 1, 2009 for some of its wholesale customers, and that PEC proposes to allocate all of its incremental REPS compliance costs between itself and its wholesale customers on an energy basis. She noted that the percentage allocable to wholesale customers during the test period was 0.3% since PEC did not begin billing wholesale customers until December 1, 2009. For the update and billing period the percentage allocated to wholesale customers for incremental REPS compliance costs is 0.47%.

Public Staff witness Johnson stated in her affidavit that the Public Staff had some concerns regarding PEC's allocation of costs and RECs between wholesale and retail customers. She noted that the Public Staff and PEC had discussed the issue and agreed that further evaluation of the issue was necessary. Ms. Johnson stated that the Public Staff would continue to review the issue.

As the Commission noted in PEC's 2009 REPS proceeding, Docket No. E-2, Sub 948, RECs funded solely by PEC's retail customers should be used exclusively for PEC's REPS compliance. Since PEC began allocating REPS costs to wholesale customers on December 1, 2009, RECs purchased prior to that date and funded solely by PEC's retail customers should be used solely for PEC's REPS obligations. Similarly, RECs associated with EE savings should be used exclusively for PEC's REPS compliance because no portion of the costs of EE measures are being allocated to and recovered from PEC's wholesale customers.

#### EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 7

The evidence supporting this finding of fact can be found in the rebuttal testimony of PEC witness Ellis and the testimony of Public Staff witness Lucas.

PEC witness Ellis explained that PEC made a grant of \$22,500 to the Electric Power Research Institute (ERPI) and the National Resource Defense Council (NRDC) to fund a study of the air quality impacts of electric vehicles. PEC seeks to recover this grant through the REPS rider as research and development costs, as defined in G.S. 62-133.8(h)(1)(b). Public Staff witness Lucas testified that the Public Staff opposes recovery of these research and development costs through the REPS rider. Witness Lucas stated that, based on the advice of counsel, it is the Public Staff's position that the General Assembly's intent in paragraph (h)(1)(b) was to only allow recovery of the costs of air quality research relating to renewable energy or EE.

PEC witness Ellis stated in her rebuttal testimony that G.S. 62-133.8(h) allows PEC to recover its total "incremental costs" incurred to comply with the renewable requirements of G.S. 62-133.8(h) through an annual per account charge. Subsection (h)(1) states that:

For purposes of this subsection, the term "incremental costs" means all reasonable and prudent costs incurred by an electric power supplier to:

...

b. Fund research that encourages the development of renewable energy, energy efficiency, or improved air quality, provided those costs do not exceed \$1,000,000 per year. [Emphasis added.]

PEC witness Ellis further testified that the purpose of the EPRI-NRDC Study is to determine the impact of electric vehicles on improved air quality, a purpose specifically and explicitly provided for in G.S. 62-133.8(h)(1)(b). She emphasized that the statute clearly states that research costs are recoverable if the research encourages the development of renewable energy, EE, or improved air quality. Nowhere in the statute is there a requirement that the improved air quality research must be associated with EE programs or renewable energy.

PEC witness Ellis explained that in 2007 EPRI, in conjunction with the NRDC, performed an environmental assessment of the greenhouse gas emissions and air quality impacts of plug-in hybrid electric vehicles. The study generated a wealth of information that will enable researchers to examine the greenhouse gas emissions impacts of different vehicle categories and generating technologies over time. It also concluded that it is clear that the carbon intensity of generation technology plays a significant role in the total greenhouse gas emissions for plug-in electric vehicles.

According to PEC witness Ellis, EPRI and the NRDC are now proposing to expand and update the original analysis by adding non-road transportation electrification, by analyzing the impact of smart charging technologies, and by incorporating revised on-road vehicle penetration projections. In addition, the update will calculate the marginal greenhouse gas abatement costs of electric transportation and determine its overall impact on key economic indicators. Witness Ellis testified that this study will provide policymakers and regulators with critical technical and economic information on the role that electric transportation and smart grid technologies may have in achieving environmental, economic and energy policy goals.

PEC witness Ellis explained that the EPRI-NRDC Study was prompted by the expectation that hybrid vehicles will increase substantially as a percentage of the nation's transportation fleet due to their perceived impact on air quality. As a result, it is appropriate to validate the theory that increased electrification of vehicles will reduce tailpipe emissions to levels that actually provide air quality benefits. This verification is essential to an assessment of the industry's policy concerning electric vehicles and its decisions with respect to generation needs, choice and location. Witness Ellis testified that the EPRI-NRDC Study is exactly the kind of air quality research authorized by G.S. 62-133.8(h), and that PEC's share of the cost, \$22,500, is reasonable, prudent, and quite modest given the overall cost of the study.

In response to questions by Commissioner Beatty, Public Staff witness Lucas agreed that the EPRI-NRDC Study has the purpose of trying to address air quality. Witness Lucas acknowledged that G.S. 62-133.8(h)(1)(b) literally includes "the development of ... improved air quality" as a topic of research that qualifies for funding. Additionally, Public Staff witness Lucas agreed that a utility did not have to research all three topics (renewable energy, EE and air quality), but that air quality alone could be

researched in order for an electric power supplier to qualify to recover the costs within the \$1,000,000 cap.

The Commission finds that the interpretation advanced by PEC is the more reasonable interpretation of G.S. 62-133.8(h)(1)(b). The issue presented is one of statutory construction. The Commission has noted on several occasions that in construing a statute the courts have held that in North Carolina “statutory interpretation properly begins with an examination of the plain words of the statute. If the language of the statute is clear and is not ambiguous, we must conclude that the legislature intended the statute to be implemented according to the plain meaning of its terms.” Three Guys Real Estate v. Harnett County, 345 N.C. 468, 472, 480 S.E.2d 681, 683 (1997). The Commission has further explained that “it is fundamental that the plain meaning of the statute ... control its applicability.” Univ. of N.C. at Chapel Hill v. Feinstein, 161 N.C. App. 700, 704, 590 S.E.2d 401, 403 (2003), disc. review denied, 358 N.C. 380, 598 S.E.2d 380 (2004). Thus, the statute “must be given effect and its clear meaning may not be evaded by an administrative body or a court under the guise of construction.” State ex rel. Utilities Commission v. Edmisten, 291 N.C. 451, 465, 232 S.E.2d 184, 192 (1977). The plain language of the statute must guide the Commission’s interpretation, and that proposed by PEC is consistent with the plain language of the statute. Therefore, PEC should be allowed to recover the \$22,500 it contributed to the EPRI-NRDC Study of the air quality impacts of electric vehicle transportation via G.S. 62-133.8(h)(1)(b).

#### EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 8-10

The evidence supporting these findings of fact appears in PEC’s application, the testimony and exhibits of PEC witness Ellis, the testimony of Public Staff witness Lucas, and the affidavit of Ms. Johnson.

PEC witness Ellis described in detail PEC’s efforts to comply with the renewable energy requirements of G.S. 62-133.8. She explained that in November of 2007, PEC issued broad requests for proposals (RFPs) for renewable energy. PEC also maintains an open RFP, though the parameters change based on conditions and needs. Besides the generic RFP, PEC issued a wood biomass RFP in November 2009. PEC has received a significant number of proposals utilizing a variety of renewable resources. Proposals submitted were compared against one another and the market. They were then evaluated in regards to PEC’s renewable energy needs and the impact on the annual cost caps in order to select projects that provide the most cost-effective means for meeting the overall objectives of Senate Bill 3. Thus far, PEC has executed more than 30 contracts, with a number of additional contracts in various stages of negotiation.

Witness Ellis testified that to meet the solar set-aside requirements, PEC launched the SunSense Commercial program in July 2009. This program encourages small scale solar photovoltaic (PV) or solar thermal installations that complement larger solar projects within PEC’s renewable portfolio. For eligible rooftop mounted solar PV systems between 10 kilowatt (kW) and 250 kW, PEC offers a standard production payment. The current annual limit on program participation is 5 megawatts (MW) per

year, and as of the filing of its 2009 REPS compliance report, PEC had executed more than 20 contracts.

According to Ms. Ellis, due to the availability of renewable resources in other areas of the country, as well as the REC requirements in other regions, out-of-state RECs can be acquired at a significantly lower price than those generated by resources in North Carolina. To meet the REPS requirements in the most cost-effective manner, PEC foresees purchasing up to 25% of its REPS requirement through out-of-state RECs as an important part of its compliance strategy. Ms. Ellis noted that the RECs included in PEC's compliance report were obtained through a combination of bundled agreements for the purchase of energy and RECs, contracts for the purchase of unbundled RECs, and EE RECs from approved programs.

With regard to the purchase of renewable energy generated from poultry and swine waste, witness Ellis testified that PEC is committed to taking all actions necessary to comply with these requirements. In May 2009, PEC issued an RFP specifically for swine waste generation, but it has not executed any contracts under that RFP. PEC has joined with the other electric power suppliers in the State to develop and issue a state-wide RFP for swine waste generation that will allow for the joint negotiation and procurement of swine waste resources. The Commission approved the issuance of the RFP in Docket No. E-100, Sub 113, on February 12, 2010, and the RFP was issued on February 15, 2010, with a bid deadline of April 15, 2010. Various electric power suppliers are in the process of bid evaluation.

PEC has also engaged in negotiations with multiple suppliers for poultry waste generation under bundled purchased power contracts. In its March 31, 2010 Order in Docket No. E-100, Sub 113, the Commission approved the proposed pro rata mechanism of allocating the statewide aggregate swine and poultry waste set-aside requirements among the State's electric power suppliers as a means of determining compliance by any electric power supplier with the REPS provisions of Senate Bill 3. Ms. Ellis testified that this Order will allow the State's electric suppliers to move forward with ongoing negotiations.

PEC witness Ellis testified that, besides the costs of purchases of renewable power and RECs, PEC seeks to recover the incremental labor costs associated with REPS compliance activities, costs for research and development activities to further emerging renewable technologies, and incremental costs for implementation and operation of the North Carolina Renewable Energy Tracking System.

In regard to the methodology used by PEC to calculate the incremental costs associated with its purchases from renewable energy facilities, Ms. Ellis explained that when PEC is purchasing bundled energy and RECs, it calculates the levelized avoided cost over the term of the contract. It subtracts this levelized avoided cost from the total cost associated with the renewable energy purchased to arrive at the incremental cost for that renewable energy purchase during the applicable period. She noted that for all executed contracts, PEC used the avoided cost rates set in Schedule CSP-25, as approved by Commission Order issued May 13, 2009, in Docket No. E-100, Sub 117.

Witness Ellis's Revised Exhibit No. 2, page 2, shows that PEC's filed North Carolina retail REPS compliance costs through the end of the test period (August 1, 2009 - March 31, 2010) are \$6,934,617. Revised Ellis Exhibit No. 2, page 3, shows that PEC's filed North Carolina retail REPS compliance costs during the period April 1, 2010, through July 31, 2010, are \$4,509,955. Finally, Ellis Revised Exhibit No. 2, page 4, shows that PEC's forecasted retail REPS compliance costs for the period December 1, 2010, through November 30, 2011, are \$14,484,441.

The Public Staff recommended two adjustments to PEC's filings of its incremental costs for the test, update, and billing periods. As discussed in the Evidence and Conclusions for Finding of Fact No. 7, the Public Staff contested PEC's inclusion in its incremental costs for the test period relating to the research costs associated with electric vehicles. The Commission concluded that it was appropriate for PEC to include such costs as incremental costs for the test period. Therefore, the Commission finds that PEC's incremental costs of retail REPS compliance total \$6,934,617 for the test period. No party disputed PEC's filed North Carolina retail REPS compliance costs during the period April 1, 2010, through July 31, 2010, of \$4,509,955.

Additionally, Public Staff witness Lucas testified that the Public Staff discussed with PEC the exclusion of an undesignated research expense of \$200,000 from its forecasted incremental costs, and that PEC had agreed to remove the expense. After allocating 0.44% of these costs to wholesale customers, the Commission concludes that PEC's forecasted incremental costs of REPS compliance for the period December 1, 2010, through November 30, 2011, are \$14,285,321.

Ellis Revised Exhibit No. 2, attached to PEC witness Ellis' direct testimony and updated in her supplemental testimony, shows that PEC's recovery of incremental costs from its retail customers amounted to \$7,011,394 for the period August 2009 through March 2010, and PEC's incremental retail costs were \$4,509,955 for the update period, April 2010 through July 2010, \$96,568 less than PEC had forecasted. Ms. Ellis explained that the decrease in costs during the update period was driven largely by fewer solar purchases than anticipated and timing differences in research and development spending. A comparison of the costs recovered with the incremental costs incurred shows that PEC has experienced an over-recovery of \$173,344 during these two periods; consequently, PEC must refund \$173,344 with interest. Ms. Ellis testified that as PEC over-recovered from each customer class for this period, it applied interest individually to each customer class and multiplied the class's over-recovery by the Commission-established interest rate of 0.83% per month or 10% per annum to determine a monthly interest amount. This amount was then multiplied by 16, the number of months from the midpoint of the test period to the mid-point of the billing period. Interest totaled \$23,113 for the 16-month period. Therefore, a total of \$196,457 should be refunded to customers through the REPS EMF rider during the billing period. PEC's testimony and exhibits regarding this issue were not disputed by any party.

Public Staff witnesses Lucas and Johnson testified that they had reviewed and analyzed the REPS incremental costs for which PEC has requested recovery in this proceeding. Besides the two adjustments discussed above, the Public Staff did not

dispute that PEC should be allowed to recover its REPS compliance costs. No other party presented any evidence regarding PEC's REPS incremental costs. Therefore, the Commission approves PEC's REPS incremental costs, after removal of the undesignated research costs in the billing period, as reasonable and prudent. Commission Rule R8-67(e)(5) provides that the reasonableness and prudence of the costs incurred during the update period shall be subject to review in the utility's next annual REPS cost recovery hearing.

#### EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 11

The evidence supporting this finding of fact appears in PEC's application and in the testimony and exhibits of PEC witness Ellis.

PEC witness Ellis testified that, pursuant to the Commission's November 12, 2009 Order in Docket No. E-2, Sub 948, PEC defines a customer for purposes of REPS billing as all accounts (metered and unmetered) serving the same customer of the same revenue classification located on the same or contiguous properties. If a customer has accounts that serve in an auxiliary role to a main account on the same premise, PEC applies no REPS charge to the auxiliary accounts, regardless of their revenue classification. Upon written notification from a customer, accounts meeting these criteria are coded in the billing system so that the customer will receive only one monthly REPS charge for all identified accounts. Using this definition of customer, Ellis Revised Exhibit No. 3 demonstrated that the number of customer accounts estimated to be assessed for payment of the REPS and REPS EMF riders is 1,105,854 in the residential class, 178,898 in the commercial class, and 1,979 in the industrial class.

#### EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 12-15

The evidence supporting these findings of fact appears in PEC's application, the testimony and exhibits of PEC witness Ellis, the testimony of Public Staff witness Lucas, and the affidavit of Ms. Johnson.

PEC witness Ellis explained the detailed calculation of the REPS rider associated with each customer class, as defined by G.S. 62-133.8. She testified that the total deferred and projected incremental costs to comply with G.S. 62-133.8 were summed for the time periods covered by this proceeding. Each customer class was then allocated its share of the deferred and projected incremental cost based on its pro rata share of the customer cost caps defined in G.S. 62-133.8. In simple form, this proration formula is the total 2010 dollars available from a specific customer class, divided by the total 2010 dollars available from all customer classes. The cost allocated to each customer class was then divided by the estimated average number of accounts within each customer class during the twelve months ending December 2010, to arrive at the total annual cost to be recovered from each account. The monthly REPS Rider for each customer class is then one-twelfth of the total annual cost. Ms. Ellis testified that the annual rates for each customer class are below the caps as defined in G.S. 62-133.8. None of the intervenors took issue with Ms. Ellis' procedure for calculating the monthly

rider amounts. The Public Staff's only disagreement with PEC in this case related to inclusion in the test period of costs related to electric vehicle research, which the Commission concluded was an appropriate REPS compliance cost, and in the billing period, \$200,000 of costs related to undesignated research, which the parties have agreed to exclude.

Ms. Ellis calculated monthly REPS rider amounts of \$0.57 for the residential class, \$2.87 for the commercial class, and \$28.75 for the industrial class. With the exclusion of the \$200,000 for undesignated research costs, Public Staff witness Lucas calculated the monthly amount of the REPS rider per customer account, excluding gross receipts tax and regulatory fee, to be collected during the billing period as \$0.57 for customer accounts in the residential class, \$2.84 for customer accounts in the commercial class, and \$28.35 for customer accounts in the industrial class. The Commission finds these charges as calculated by Mr. Lucas to be appropriate.

Ms. Ellis calculated monthly REPS EMF rider amounts of (\$0.01) for the residential class, (\$0.04) for the commercial class, and (\$0.39) for the industrial class. Mr. Lucas recommended that the test period costs associated with research on electric vehicles be disallowed as discussed in Finding of Fact No. 7. Mr. Lucas calculated the same REPS EMF rates for the residential and commercial classes as PEC, but a rate of (\$0.44) for the industrial class. Based on its conclusion regarding the research costs associated with electric vehicles in Finding of Fact No. 7, the Commission finds a REPS EMF rate of (\$0.39) for the industrial class, as well as the undisputed monthly REPS EMF charges for the residential and commercial classes to be appropriate.

Therefore, the combined monthly REPS and REPS EMF rates, excluding gross receipts tax and the regulatory fee, are \$0.56 for customer accounts in the residential class, \$2.80 for customer accounts in the commercial class, and \$27.96 for customer accounts in the industrial class. PEC applied a factor of 1.034554 to these amounts to calculate the rates including gross receipts tax and the regulatory fee. Thus, the combined monthly REPS and REPS EMF rates, including gross receipts tax and the regulatory fee, are \$0.58 for customer accounts in the residential class, \$2.90 for customer accounts in the commercial class, and \$28.93 for customer accounts in the industrial class. The combined annual totals to be collected from residential, commercial and industrial customers are \$6.96, \$34.80, and \$347.16, respectively. These amounts are below the annual cost caps of \$10, \$50 and \$500, respectively, and the riders are therefore within the annual cost caps established by G.S. 62-133.8(h)(4).

#### EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 16

The evidence supporting this finding of fact is found in the testimony of PEC witness Ellis and Public Staff witness Lucas.

At the hearing, PEC witness Ellis testified that, based on additional contracts that PEC had executed since the filing of her direct testimony, PEC should have sufficient RECs for compliance through 2015 with a minimal need in 2016. Ms. Ellis noted that if PEC is able to contract for its pro rata share of energy from swine and poultry waste

resources, PEC will be compliant through 2017. She testified that PEC hopes to sign contracts by the end of the year to meet its swine and poultry waste set-aside requirements and that PEC was in discussions with multiple potential suppliers of energy from swine and poultry waste resources. Ms. Ellis indicated that it might be more difficult to comply with the REPS without first hitting the cost caps when the full REPS requirements are in place and PEC has used all of its banked RECs. She indicated that PEC projected this to occur in 2020 or later.

In her testimony filed with PEC's 2009 REPS compliance report on May 18, 2010, and the accompanying exhibit, PEC witness Ellis set forth the information required by Commission Rule R8-67(c)(1) and described PEC's methodology for determining the year-end number of customer accounts and the cap on incremental REPS costs.

Public Staff witness Lucas testified that PEC's compliance report indicates that it earned 24,930 EE RECs in 2009. He noted that the number of RECs produced from an EE program will be dependent on the measurement and verification (M&V) process, and PEC's quantification of its EE RECs cannot be definitely reviewed until the M&V process is complete. Mr. Lucas stated that the Public Staff accepts PEC's quantification of its potential EE RECs for the purposes of its 2009 REPS compliance report, with the understanding that future compliance reports would reflect actual M&V results, when available, consistent with Rule R8-67(c). No party took issue with the Public Staff's recommendation on this issue.

Commission Rule R8-67(c)(i) allows electric power suppliers to base their quantification of EE RECs on estimates of reduced energy consumption through the implementation of EE measures, to the extent approved by the Commission. The Commission notes that in its August 24, 2010 Order Requesting Comments on Measurement and Verification of Reduced Energy Consumption in Docket No. E-100, Sub 113, the Commission requested comments regarding the appropriate M&V documentation to be submitted in reference to EE/DSM programs and the proceeding, if any, in which such documentation should be reviewed. The Commission agrees with the Public Staff that PEC's quantification of its EE RECs should be accepted in this proceeding, subject to resolution of the issues posed in the August 24, 2010 Order in regard to M&V of reduced energy consumption in Docket No. E-100, Sub 113, and submission of further M&V data supporting such estimates.

In its post-hearing brief, NCSEA stated that it

commends PEC [sic] efforts and approach to REPS compliance. The blended program relying on third-party vendors, energy efficiency and to a limited extent, out-of-state RECs is consistent with the statute and its intent and in NCSEA's view, best advances the objectives the General Assembly sought to achieve by enacting the REPS.

Therefore, except as otherwise discussed herein, the Commission finds that PEC's 2009 REPS compliance report should be approved.

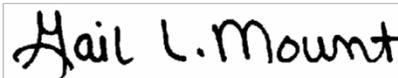
IT IS, THEREFORE, ORDERED as follows:

1. That PEC shall establish an REPS Rider as described herein, in the amounts approved herein, and this rider shall remain in effect for a 12-month period beginning on December 1, 2010, and expiring on November 30, 2011;
2. That PEC shall establish an REPS EMF Rider as described herein, in the amounts approved herein, and this rider shall remain in effect for a 12-month period beginning on December 1, 2010, and expiring on November 30, 2011;
3. That PEC shall file appropriate rate schedules and riders with the Commission in order to implement the provisions of this Order not later than seven (7) working days from the date of this Order;
4. That PEC shall work with the Public Staff to prepare a joint proposed Notice to Customers giving notice of the rate changes ordered by the Commission in Docket No. E-2, Subs 974, 976, and 977, and PEC shall file such proposed notice for Commission approval as soon as practicable;
5. That NCSEA's motion to file a supplemental submission is denied; and
6. That, except as otherwise ordered herein, PEC's 2009 REPS compliance report is approved.

ISSUED BY ORDER OF THE COMMISSION.

This the 17<sup>th</sup> day of November, 2010.

NORTH CAROLINA UTILITIES COMMISSION

A rectangular box containing a handwritten signature in black ink that reads "Gail L. Mount".

Gail L. Mount, Deputy Clerk

Sw111710.01



proceeding to determine whether a rider should be established to permit the recovery of the incremental costs incurred in order to comply with the requirements of the Renewable Energy and Energy Efficiency Portfolio Standard (REPS), G.S. 62-133.8(b), (d), (e) and (f), and to true-up any over- or under-recovery of compliance costs. Duke's Application was accompanied by the pre-filed testimony and exhibits of Kim H. Smith, Rates Manager for Duke, and Emily O. Felt, Director of Renewable Strategy and Compliance, Carolinas, for Duke Energy Corporation. In its Application and pre-filed testimony, Duke sought approval of a proposed REPS rider, which incorporates the Company's proposed adjustments to its North Carolina retail rates. One of the exhibits attached to witness Felt's testimony was Duke's 2010 REPS compliance report, which is required to be filed annually under Rule R8-67(c).

On March 15, 2011, the Commission issued an Order Scheduling Hearing, Requiring Filing of Testimony, Establishing Discovery Guidelines, and Requiring Public Notice, in which it set this matter for hearing; established deadlines for the submission of intervention petitions, intervenor testimony, and Duke's rebuttal testimony; required the provision of appropriate public notice; and mandated compliance with certain discovery guidelines.

Petitions to intervene were filed by Carolina Industrial Group for Fair Utility Rates III (CIGFUR); GreenCo Solutions, Inc. (GreenCo); Carolina Utility Customers Association, Inc. (CUCA); North Carolina Sustainable Energy Association (NCSEA); and Blue Ridge Electric Membership Corporation (Blue Ridge EMC). Each of these petitions to intervene was allowed by the Commission. The intervention and participation of the Public Staff are recognized pursuant to G.S. 62-15(d) and Commission Rule R1-19(e).

On May 13, 2011, Duke filed affidavits of public notice indicating that public notice had been provided in accordance with the Commission's procedural order.

On May 18, 2011, the Public Staff filed the testimony and exhibits of Randy T. Edwards, Staff Accountant, and the testimony of Jay B. Lucas, Utilities Engineer; and NCSEA filed the testimony of its Executive Director, Ivan K. Urlaub. On June 2, 2011, Duke filed the rebuttal testimony and exhibits of witness Smith and the rebuttal testimony of witness Felt. On June 6, 2011, the Public Staff filed the revised testimony and exhibits of witness Edwards and the revised testimony of witness Lucas.

On June 6, 2011, the Commission issued an order authorizing Duke witnesses Smith and Felt to appear as a panel and continuing the evidentiary hearing until June 8, 2011. The public hearing was held as scheduled on June 7, 2011, and no public witnesses appeared. At the evidentiary hearing on June 8, the Commission granted an oral motion of the Public Staff that its witnesses be allowed to appear as a panel. Duke presented the testimony and exhibits of witnesses Smith and Felt; the Public Staff presented the testimony and exhibits of witness Edwards and the testimony of witness Lucas; and NCSEA presented the testimony of witness Urlaub.

Based upon the foregoing, the testimony and exhibits introduced at the hearing, Duke's records in the North Carolina Renewable Energy Tracking System (NC-RETS), and the entire record in this proceeding, the Commission now makes the following

### **FINDINGS OF FACT**

1. Duke is duly organized as a public utility company under the laws of the State of North Carolina and is subject to the jurisdiction of this Commission. Duke is engaged in the business of generating, transmitting, distributing and selling electric power to the public in North Carolina. Duke is also an electric power supplier as defined in G.S. 62-133.8(a)(3). Duke is lawfully before this Commission based upon its Application filed pursuant to G.S. 62-133.8 and Commission Rule R8-67.

2. Under the State's Renewable Energy and Energy Efficiency Portfolio Standard (REPS) established by G.S. 62-133.8, beginning in the year 2010, electric power suppliers must supply at least 0.02% of their previous year's North Carolina retail energy sales by a combination of new solar electric facilities and new metered solar thermal energy facilities. In 2012, this solar requirement increases to 0.07% of the previous year's North Carolina retail sales. Also in 2012, electric power suppliers must generally meet 3% of their previous year's North Carolina retail electric sales by a combination of renewable energy and energy reductions due to the implementation of energy efficiency (EE) measures. The electric power suppliers of North Carolina are required by G.S. 62-133.8 to procure a certain portion of their renewable energy requirements beginning in 2012 from electricity generated by poultry and swine waste.

3. G.S. 62-133.8(h)(4) provides that an electric power supplier shall be allowed to recover through an annual rider the incremental costs incurred to comply with the REPS.

4. Under Commission Rule R8-67(e)(2), the total amount of costs reasonably and prudently incurred during the test period to purchase unbundled renewable energy certificates (RECs) constitute incremental costs. The projected costs to purchase such RECs during the billing period constitute forecasted incremental costs.

5. Duke has agreed to provide REPS compliance services, including the procurement of RECs, to the following electric power suppliers pursuant to G.S. 62-133.8(c)(2)(e): Blue Ridge EMC, the City of Concord, the Town of Dallas, the Town of Forest City, the City of Highlands, the City of Kings Mountain and Rutherford EMC.

6. Duke and the seven electric power suppliers to which Duke is providing compliance services met their 2010 REPS obligations. Duke's 2010 REPS compliance report should be approved.

7. For purposes of Duke's annual rider pursuant to G.S. 62-133.8(h), the test period and billing period for this proceeding are, respectively, the calendar year 2010, and the 12-month period ending August 31, 2012.

8. In Docket No. E-7, Sub 856, the Commission concluded that it is appropriate for Duke, as one component of its effort to comply with the solar requirements of the REPS, to install a limited amount of self-built solar distributed generation. It is not appropriate in this proceeding to address issues regarding the public convenience and necessity of future electric generating facilities.

9. Duke appropriately based the incremental costs of its Solar Distributed Generation (DG) program to be recovered by the REPS riders upon the levelized revenue requirements of the capital and operating costs over the expected lives of the solar facilities less the levelized avoided costs and limited by the effective price per MWh submitted by the third-place bidder in response to Duke's request for proposals (RFP).

10. For purposes of establishing the REPS EMF rider in this proceeding, Duke's incremental Solar DG program costs amount to \$752,710.

11. Duke has appropriately made information available about the research and administrative costs it seeks to recover through the REPS rider, and it has not acted improperly in filing some information under seal.

12. The research activities funded by Duke during the test period and the billing period are renewable research costs recoverable under G.S. 62-133.8(h)(1)(b). The research costs are within the statute's \$1-million annual limit.

13. For purposes of establishing the REPS EMF rider in this proceeding, Duke's incremental costs for REPS compliance during the test period were \$8,637,984, including the costs incurred for its wholesale customers, and these costs were reasonable and prudently incurred.

14. Duke's North Carolina test period REPS expense under-collection was \$1,916,078, \$1,258,995 and \$461,049 for Duke's residential, general service and industrial customer classes, respectively, excluding gross receipts tax and regulatory fee.

15. Duke's North Carolina billing period expense for use in this proceeding is \$7,133,159, 4,805,286 and \$1,170,796 for Duke's residential, general service and industrial customer classes, respectively, excluding gross receipts tax and regulatory fee.

16. The appropriate monthly amount of the REPS EMF rider per customer account, excluding gross receipts tax and regulatory fee, to be collected during the

billing period is \$0.10 for residential accounts, \$0.49 for general service accounts, and \$7.37 for industrial accounts.

17. The appropriate monthly amount of the REPS rider per customer account, excluding gross receipts tax and regulatory fee, to be collected during the billing period is \$0.37 for residential accounts, \$1.87 for general service accounts, and \$18.70 for industrial accounts.

18. The combined monthly REPS and REPS EMF rider charges per customer account, excluding gross receipts tax and regulatory fee, to be collected during the billing period are \$0.47 for residential accounts, \$2.36 for general service accounts, and \$26.07 for industrial accounts.

19. Duke's REPS incremental cost rider to be charged to each customer account for the billing period is within the annual cost caps established in G.S. 62-133.8(h)(4).

20. It is appropriate for Duke and the Public Staff to jointly evaluate Duke's cost allocation between retail and wholesale customers for renewable energy certificates (RECs) derived from energy efficiency and electricity obtained from the Southeastern Power Administration (SEPA). If necessary, either party or both parties may propose a different allocation method than that used in the current proceeding.

#### EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 1-5

These findings of fact are essentially informational, jurisdictional and procedural in nature and are not contested.

G.S. 62-133.8(b)(1) establishes a REPS for all electric power suppliers in the State. The statute requires, for example, each electric public utility to provide a certain percentage of its North Carolina retail sales from various renewable energy or energy efficiency resources, including the following: (a) generating electric power at a new renewable energy facility; (b) using 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; (c) reducing energy consumption through the implementation of energy efficiency measures; (d) purchasing electric power from a new renewable energy facility; (e) purchasing renewable energy certificates; or (f) using electric power that is supplied by a new renewable energy facility or saved due to the implementation of an energy efficiency measure that exceeds the requirements of the REPS for any calendar year as a credit towards the requirements of the REPS in the following calendar year. Each of these measures is subject to certain additional limitations and conditions. In 2012, Duke must generally meet 3% of its previous year's North Carolina retail electric sales by a combination of these measures.

G.S. 62-133.8(d) requires a certain percentage of the total electric power sold to retail electric customers in the State, or an equivalent amount of energy, to be supplied by a combination of new solar electric facilities and new metered solar thermal energy facilities. The percentage requirement for solar resources is 0.02% for 2010-11 and 0.07% for 2012.

G.S. 62-133.8(e) requires a certain percentage of the total electric power sold to retail electric customers in the State to be supplied, or contracted for supply each year, by swine waste. In 2012, the aggregate requirement for swine waste resources is 0.07%. G.S. 62-133.8(f) requires a specific amount of electric power sold to retail electric customers in the State to be supplied, or contracted for supply each year, by poultry waste resources. In 2012, the aggregate requirement for poultry waste resources is 170,000 megawatt-hours (MWh). Pursuant to the Commission's Order on Pro-Rata Allocation of Aggregate Swine and Poultry Waste Set-Aside Requirements and Motion for Clarification, issued on March 31, 2010, in Docket No. E-100, Sub 113, Duke's share of the aggregate State set-aside requirements for energy from swine and poultry waste is based on the ratio of its North Carolina retail kilowatt-hour sales for the previous year divided by the previous year's total North Carolina retail kilowatt-hour sales.

G.S. 62-133.8(h)(4) requires the Commission to allow an electric power supplier to recover all of its incremental costs incurred to comply with G.S. 62-133.8 through an annual rider. G.S. 62-133.8(h)(1) provides that "incremental costs" means all reasonable and prudent costs incurred by an electric power supplier to comply with the REPS requirements that are in excess of the electric power supplier's avoided costs other than those costs recovered pursuant to G.S. 62-133.9. The term "avoided costs" includes both avoided energy costs and avoided capacity costs.

Commission Rule R8-67(e)(5) provides that "[t]he REPS EMF rider will reflect the difference between reasonable and prudently incurred incremental costs and the revenues that were actually realized during the test period under the REPS rider then in effect."

Duke's 2010 REPS compliance report states that, pursuant to G.S. 62-133.8(c)(2)(e), the Company provides renewable energy resources and compliance reporting services for Blue Ridge EMC, the City of Concord, the Town of Dallas, the Town of Forest City, the City of Highlands, the City of Kings Mountain and Rutherford EMC. Available methods of REPS compliance for these municipal electric suppliers and EMCs are those set forth in G.S. 62-133.8(c).

#### EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 6

The evidence supporting this finding of fact appears in Duke's 2010 REPS compliance report and in the testimony of Duke witness Felt and Public Staff witness Lucas. In addition, the Commission takes judicial notice of information contained in NC-RETS.

Duke's 2010 REPS compliance report was admitted into evidence as Exhibit 1 to the testimony of Duke witness Felt. Witness Felt testified that the report provides the information required by Commission Rule R8-67(c) in aggregate for Duke and the wholesale customers for which Duke has agreed to provide REPS compliance services. Public Staff witness Lucas testified that he had reviewed the compliance report and that it meets the requirements of Commission Rule R8-67(c).

Duke's 2010 REPS compliance report states that the combined 2009 retail electric sales for itself and the seven wholesale customers for which it provides compliance services was 57,396,449 MWh; hence, the related 2010 REPS obligation was 11,479 solar RECs. Public Staff witness Lucas stated that this number of RECs meets the REPS requirement that 0.02% of 2009 retail sales must be matched with an equivalent number of RECs derived from solar energy in 2010. Witness Lucas stated that, of the 11,479 RECs placed into Duke's compliance subaccount in NC-RETS, 2,870 were out-of-state RECs, in compliance with the provision of G.S. 62-133.8(b)(2)(e) and (c)(2)(d) that out-of-state RECs may not be used to meet more than 25 percent of a utility's REPS requirements.

According to the records in NC-RETS, Duke correctly transferred 11,479 solar RECs into two NC-RETS compliance sub-accounts, one ear-marked toward Duke's 2010 obligation and the other toward the seven wholesale customers' 2010 obligations. No parties disputed whether Duke and the wholesale customers complied with their 2010 REPS requirements, and both the Public Staff and NCSEA stated that Duke and the seven wholesale customers had met the 2010 REPS requirements.

Therefore, the Commission finds and concludes that Duke and the seven wholesale customers for which it is providing REPS compliance services have fully complied with the requirements of the REPS for 2010, and that Duke's 2010 REPS compliance report should be approved.

#### EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 7

This finding of fact is essentially informational, jurisdictional and procedural in nature and is not controversial.

Commission Rule R8-67(e)(3) provides that the test period for REPS rider proceedings shall be the same as that used by the utility in its fuel charge adjustment proceedings, which is specified in Rule R8-55(c) for Duke to be the calendar year. Therefore, Duke proposed that the test period for its REPS cost recovery proceeding be the calendar year 2010.

Rule R8-67(e)(4) provides that the REPS and REPS EMF riders shall be in effect for a fixed period that "shall coincide, to the extent practical, with the recovery period for the cost of fuel and fuel-related cost rider established pursuant to Rule R8-55." In its current fuel adjustment proceeding, Docket No. E-7, Sub 982, and in this proceeding,

Duke proposed that its rate adjustments take effect on September 1, 2011, and remain in effect for a 12-month period. This period is the “billing period.”

The test period and billing period proposed by Duke were not challenged by any party. Therefore, the Commission finds and concludes that the test period and billing period appropriate for this proceeding are the calendar year 2010 and the twelve months ending August 31, 2012, respectively.

#### EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 8

The evidence for this finding of fact is found in the testimony and exhibits of Duke witness Felt, the testimony of NCSEA witness Urlaub, and the Commission’s orders in Docket No. E-7, Sub 856.

Duke witness Felt testified regarding Duke’s strategy for REPS compliance. With regard to the solar requirements, witness Felt stated that this included the construction of 9.95 megawatt (MW) direct current (8.45 MW alternating current) of solar photovoltaic (PV) capacity through the Duke Energy North Carolina Solar Photovoltaic Distributed Generation Program (Solar DG program), approved by the Commission in Docket No. E-7, Sub 856.

NCSEA witness Urlaub testified that Duke’s compliance strategy may not be the best and least-cost approach to compliance, but may result in potential problems such as reaching the incremental cost cap ceiling prematurely resulting in less renewable energy being generated. He requested that the Commission consider issuing a statement that indicates that future significant disparities between the costs of self-generation and third-party market prices should make it difficult to justify self-generation as being in the public interest and meeting the public convenience and necessity standard.

In her rebuttal testimony, Duke witness Felt stated that both the Public Staff and the Commission have acknowledged the reasonableness of Duke’s current compliance strategy in their review and approval of the Company’s REPS compliance plan in Docket No. E-100, Sub 124. Witness Felt further stated that, if the Company makes any further application to construct additional solar generation facilities or any other renewable generation facilities, it will have to meet its burden of proof to justify the construction of those facilities based on the facts and circumstances at the time.

In Docket No. E-7, Sub 856, the Commission found that it is appropriate for Duke to use a limited amount of self-built solar DG as one component of its compliance with the solar requirements of the REPS. As regards NCSEA’s proposal, the Commission agrees with witness Felt that a utility that proposes to build additional electric generation has the burden to prove at that time that it is in the public interest. Parties such as NCSEA are free to argue in that proceeding that construction of the facility is not in the public interest, should they so choose. Therefore, because it is not appropriate in this

proceeding to address issues regarding the public convenience and necessity of future electric generating facilities, the Commission will decline to adopt NCSEA's proposal.

#### EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 9-10

The evidence supporting these findings of fact appears in the testimony and exhibits of Duke witness Smith, Public Staff witness Edwards, and the record in Docket No. E-7, Sub 856.

The Commission's orders in Docket No. E-7, Sub 856 state that not all of the costs of Duke's Solar DG program may be recovered through the REPS riders. First, the effective avoided costs must be recovered through base rates. In addition, the costs in excess of \$170/MWh<sup>1</sup> must also be recovered through base rates in order to ensure that the cost incurred for the Solar DG program does not cause Duke to prematurely reach the cost caps imposed by G.S. 62-133.8(h)(3) and (4). Witness Smith testified regarding how these costs were calculated and subtracted from the levelized annual fixed Solar DG program costs. Through these calculations, she determined that the incremental costs of the Solar DG program for the test year amounted to \$752,710, as shown in Smith Exhibit No. 1, page 1. Duke proposed to recover these costs in the REPS EMF rider.

On cross-examination, witness Smith asserted that, just as the capital costs of a fossil or nuclear plant are fixed and recovered in roughly equal amounts from year to year, without regard to the amount of power the plant generates in a particular test year, it is appropriate for the Solar DG program to be treated in the same manner. Ms. Smith stated that her levelization method was equivalent to multiplying \$170/MWh by the projected output of the Solar DG program, rather than its actual output; that it is unusual to use projections in an EMF proceeding; and that under her levelization method, even if the Solar DG program were to produce no power at all during a given test year, the Company would recover the same level of costs as if the facilities had operated at maximum output.

Public Staff witness Edwards testified that he believed that Duke had used an improper method of calculating incremental Solar DG program costs. He asserted that the proper method would have been to multiply the actual test-year output of the Solar DG program facilities (not their projected output) by \$170/MWh and to then subtract avoided costs. Accordingly, witness Edwards calculated that test-year incremental Solar DG program costs amounted to \$585,282, rather than the \$752,710 asserted by Duke.

The Commission determines that the Public Staff's proposed approach has some appeal in that it would link cost recovery via the REPS riders directly to the amount of renewable energy produced by Duke's solar DG facilities as if Duke were purchasing

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<sup>1</sup> In Docket No. E-7, Sub 856, this figure was referred to as "the effective price per MWh submitted by the third-place bidder in response to Duke's solar RFP" in order to protect the confidentiality of the third-place bid. However, Duke has acknowledged that this figure no longer needs to be kept confidential, and in this Order it is simply referred to as \$170/MWh.

renewable energy from a third party. However, Duke is not purchasing from a third party in this case, and over the long term the Commission concludes that Duke's customers would be better served by a cost-recovery approach that is predictable and allows for easy tracking of REPS-related costs and their relation to the REPS incremental cost caps. In the Solar DG program CPCN proceeding, the Commission limited the amount of costs to be recovered through the REPS rider to leave headroom so as to reduce the likelihood of Duke prematurely reaching the cost caps. This limitation forced Duke to recover a portion of its incremental costs from its Solar DG program through base rates. The Commission deems it unwise to recover through base rates non-variable production plant costs as a function of production output that varies from year to year, as called for by the Public Staff's proposed method. For these reasons, the Commission supports Duke's proposed cost-recovery approach for its reasonable and prudent Solar DG program costs. However, the record is not clear as to whether Duke's calculation of 2010 Solar DG program costs based upon the projected output over a full year appropriately captures the fact that the Solar DG facilities came on-line throughout 2010, and that none of them were operational for the entire 2010 calendar year.<sup>2</sup> Therefore, while the Commission will approve Duke's approach for calculating the amount of incremental costs to be recovered via the REPS riders based upon the levelized revenue requirements, avoided costs and RFP ceiling price, the Commission will require Duke to demonstrate in its next REPS proceeding how its 2010 Solar DG program cost calculations account for the various in-service dates of the facilities in the program.

#### EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 11-15

The evidence supporting these findings of fact is found in the testimony and exhibits of Duke witnesses Smith and Felt, the testimony and exhibits of Public Staff witnesses Lucas and Edwards, the testimony of NCSEA witness Urlaub, and the record in Docket No. E-7, Sub 856.

Duke witness Smith testified regarding the methodology used by Duke to calculate the incremental costs of compliance with the REPS requirements. Ms. Smith testified that Duke's proposed REPS EMF rider includes incremental administration and labor costs incurred during the test period. These costs of \$2,493,975 are shown on page 1 of Smith Exhibit No. 1.

Duke witness Felt testified regarding the research costs incurred by Duke during the test period, which are \$750,765, and research costs planned for the billing period, which are \$436,836. These costs are shown in Felt Exhibit No. 2.

NCSEA witness Urlaub testified that a significant portion of Duke's incremental costs, \$2,503,340 in the billing period, are identified as "other." He stated that it appears that some of the costs described by Duke witness Felt are essentially one-time costs involving the development and implementation of models or tracking systems. Also,

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<sup>2</sup> The Commission takes judicial notice of Duke's February 10, 2011 submittal in Docket No. E-7, Sub 856, which lists the in-service dates for each facility in Duke's Solar DG program.

witness Urlaub stated that the research component of what Duke seeks to recover lacks detail and is not explained in the compliance report or elsewhere.

In her rebuttal testimony, Duke witness Felt stated that the term “other incremental costs” in Felt Exhibit No. 2 includes recurring internal labor costs associated with REPS compliance, recurring non-labor costs for Duke’s internal REC accounting system, annual fees related to NC-RETS, and miscellaneous non-recurring expenses such as broker fees and consulting services. She referred to the Commission’s Order Approving REPS and REPS EMF Riders in Docket No. E-7, Sub 936, in which the Commission approved the amortization of the costs of the Company’s internal REC accounting system over a five-year period, to illustrate the recurring nature of some of these costs. Witness Felt also listed specific research efforts undertaken by Duke, including: (a) research regarding cultivation and development of purpose-grown trees and crops as biomass fuels for renewable energy generation; (b) further evaluation and research regarding technological alternatives for co-firing woody biomass with coal; (c) purchase of reports and analysis from the Electric Power Research Institute regarding renewable energy development issues, primarily related to biomass technologies, (d) participation in Phase 2 of a University of North Carolina ocean-side offshore wind feasibility study; and (e) development of a pilot-scale swine waste-to-energy generation technology in cooperation with Duke University at Loyd Ray Farms.

NCSEA witness Urlaub also commented on the general need for more transparency in the filings made at the Commission. He stated that a meaningful analysis of Duke’s approach to compliance would be impossible based only on the non-confidential information filed with the Commission and that the public would have a difficult time determining if the public interest is served based on the non-confidential version of Duke’s filing.

Duke witness Felt stated that Duke remains very concerned about third-party developers and bidders gaining access to market-sensitive information, such as Duke’s willingness to pay for a particular resource to meet the poultry or swine set-aside, to the detriment of the Company’s customers. Witness Felt further stated that Duke is statutorily accountable to its customers to meet its REPS obligation in the most reasonable and prudent manner under the circumstances, which necessarily includes maximizing its ability to transact with third parties to secure resources at favorable prices and terms. Because the disclosure of specific information might impair the Company’s ability to negotiate and transact at favorable prices, Duke believes it is not in the best interests of its customers to disclose this information.

Witness Felt stated that, in response to the concerns raised by NCSEA witness Urlaub, Duke will comprehensively review the necessity to maintain the confidentiality of all of the redacted information contained in its REPS compliance filings and, to the extent the Company believes that its customers will not be harmed by the disclosure of certain information, make appropriate adjustments to the Company’s next REPS compliance plan filing to be made September 1, 2011.

Witness Felt testified that she is satisfied that the REPS compliance costs incurred by Duke during the test period had been prudently incurred. She stated that Duke maintains a diverse and balanced portfolio of renewable resources to meet its REPS requirements. This balanced portfolio includes the use of Duke-owned assets, the purchase of bundled renewable energy and RECs on the market, the purchase of unbundled RECs from in-state and out-of-state suppliers, and cost-effective energy efficiency savings. Additionally, during the test period, Duke largely completed construction of its Solar DG program facilities; continued co-firing applications at certain existing Company-owned fossil generation plants with woody biomass fuels; continued to assess the possibility of biomass co-firing or repowering at other fossil plants; and engaged in research and development activities. Duke produced or procured 11,479 RECs from solar energy resources in 2010, fully meeting its REPS obligations for the year. Duke entered into several agreements during the test period to purchase power or RECs from swine waste generation facilities, and it is engaged in active negotiations with other swine waste generation facilities and with poultry waste generation facilities.

As regards NCSEA's concerns with data transparency, the Commission notes that, in other proceedings, utilities have objected to filing data related to the prices paid for RECs and other renewable energy market data, asserting that it is subject to trade secret protection. Under G.S. 132-1.2, a utility has the right to file information under seal when the information constitutes a trade secret. (State ex rel. Utilities Commission v. MCI Telecommunications Corp., 132 N.C. App. 625, 514 S.E.2d 276 (1999)). The Commission recognizes that disclosure of certain information could affect a public utility's ability to negotiate with providers of renewable energy products, and, therefore, supports Duke's continued maintenance of the proprietary nature of some of this information. The Commission also recognizes the value of making more of this information public so as to improve customer confidence in the expenditures that are being made, as well as to potentially prompt further innovations and reductions in the cost of REPS compliance. The Commission commends Duke's willingness to review and appropriately reduce the confidential portions of its future REPS filings.

The Commission finds and concludes that Duke has appropriately made information available about the research and administrative costs it seeks to recover through the REPS rider in this proceeding, and it has not acted improperly in filing some information under seal. The Commission also finds and concludes that the research activities funded by Duke during the test period and planned for the billing period are renewable research costs recoverable under G.S. 62-133.8(h)(1)(b), and that the research costs included are within the \$1 million annual limit.

No party offered evidence that any of Duke's REPS compliance costs were imprudently incurred. To the extent that NCSEA witness Urlaub's concerns about the cost of Duke's Solar DG program may be viewed as an assertion of imprudence, the Commission has addressed these concerns in the discussion of Finding of Fact No. 8 above.

The Commission, therefore, finds and concludes that Duke's under-recovery of REPS compliance costs during the test period are as shown on page 2 of Smith Exhibit No. 2, and that Duke's projected incremental REPS costs for the billing period are as shown on page 5 of Smith Exhibit No. 2.

#### EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT 16-19

The evidence supporting these findings of fact appears in the testimony of Duke witness Smith and Public Staff witnesses Edwards and Lucas.

Duke witness Smith provided a detailed explanation of the procedure by which she arrived at her recommended monthly and annual REPS and REPS EMF riders. She discussed the methodology by which Duke calculated its costs of REPS compliance for both the test period and billing period and the procedure used to calculate avoided costs for power purchase agreements already executed and those not yet executed. She outlined Duke's method of allocating REPS compliance costs between its retail customers and the wholesale customers for which it has agreed to provide REPS compliance services, and she discussed the "buy-in" payment made by Blue Ridge EMC when it began purchasing REPS compliance services from Duke. Blue Ridge EMC began receiving compliance services during the test period, and it was required to reimburse Duke through the "buy-in" payment for its share of all incremental REPS costs incurred by Duke through December 31, 2010. Witness Smith further explained the procedure by which the total costs of compliance were allocated among industrial, general and residential customers based on the customer classes' pro rata shares of their aggregate cost caps provided in G.S. 62-133.8(h). She described the procedure used by Duke to ensure that the wholesale customers receive exclusive credit for power supplied to them by SEPA and that Duke's retail customers receive exclusive credit for energy savings resulting from Duke's retail EE programs. She noted that the total compliance costs allocable to retail customers for the test period were reduced by actual REPS revenues received from retail customers during that period to obtain the total under-collection to be recovered through the EMF, and she explained that the total compliance costs applicable to each customer class were divided by the number of accounts in that class to arrive at proposed monthly and annual riders.

Witness Smith's Exhibit No. 2, at page 2, shows that she calculated a total test period under-collection of incremental REPS costs amounting to \$2,127,135 for the residential class, \$1,401,509 for the general class, and \$496,163 for the industrial class. As shown on page 6 of the Exhibit, this resulted in proposed monthly REPS EMF rider charges of \$0.10, \$0.49, and \$7.37 for the residential, general and industrial classes respectively, excluding gross receipts tax and regulatory fees. Page 5 of the same Exhibit shows that witness Smith calculated projected incremental REPS costs for the billing period as \$7,133,159 for the residential class, \$4,805,286 for the general class, and \$1,170,796 for the industrial class. Duke's proposed monthly REPS riders for projected costs, as shown on pages 5 and 6 of the Exhibit, are \$0.37, \$1.87 and \$18.70 for the residential, general, and industrial classes, respectively, excluding gross receipts tax and regulatory fee.

Public Staff witness Edwards testified that his investigation of Duke's filing included evaluating whether Duke properly determined its incremental REPS compliance costs for the test period. This included a review of Duke's Application and testimony, and other data provided by Duke in response to Public Staff data requests and a review of specific kinds of expenditures, including expenditures for research and development. As a result of his investigation, he proposed an adjustment to test-period Solar DG program costs as discussed in Finding of Fact No. 10 above. Witness Edwards did not take issue with any other aspect of Duke's filing.

Witness Edwards' Revised Exhibit No. 2, at page 1, shows that as a result of his adjustment to Solar DG program costs, he calculated a test-period under-recovery of incremental REPS costs amounting to \$2,041,670 for the residential class, \$1,343,835 for the general class, and \$478,842 for the industrial class. After applying a \$383,449 credit from Blue Ridge EMC's "buy in," witness Edwards calculated a test period under-recovery of \$1,833,456 for the residential class, \$1,203,241 for the general class, and \$444,201 for the industrial class. His proposed monthly REPS EMF riders are \$0.10, \$0.47 and \$7.10 for the residential, general and industrial class respectively, excluding gross receipts tax and regulatory fee.

Public Staff witness Lucas testified that he had reviewed Duke's proposed REPS rider for projected expenses in the billing period, and he recommended that it be approved.

As discussed above, the Commission finds and concludes that the Public Staff's proposed adjustment to Duke's test period Solar DG program costs is not appropriate. The Commission, therefore, finds and concludes that Duke's appropriate monthly REPS EMF riders are as set out on page 1 of Smith Exhibit No. 2. The Commission further finds that Duke's appropriate monthly REPS riders are as shown on pages 5 and 6 of Smith Exhibit No. 2. As shown in the table on page 6 of witness Smith's Exhibit No. 2, the combined monthly amounts of the REPS and REPS EMF riders, excluding gross receipts tax and the regulatory fee, amount to \$0.47, \$2.36 and \$26.07 for the residential, general and industrial class, respectively. On an annual basis, these amounts equate to \$5.64 for the residential class, \$28.32 for the general class, and \$312.84 for the industrial class. These amounts are less than the annual per-account cost caps of \$10, \$50 and \$500 for riders in effect in 2011, and the annual per account cost caps of \$12, \$150 and \$1,000 in effect for 2012, both of which were established by G.S. 62-133.8(h)(4).

## EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT 20

The evidence for this finding of fact appears in the testimony of Public Staff witness Lucas.

Witness Lucas testified that the Public Staff is concerned about how RECs derived from EE programs and from purchases of power from SEPA are allocated

between Duke's retail and wholesale customers. Witness Lucas asserted that both of these kinds of RECs are essentially cost-free to Duke. Duke can earn EE RECs only by making EE programs available to retail customers, not to wholesale customers. On the other hand, SEPA RECs can be obtained only by wholesale customers that make purchases from SEPA, not by retail customers. Duke has designed a procedure to ensure that retail customers are not given the benefit of cost-free SEPA RECs and wholesale customers are not given the benefit of EE RECs; however, this procedure is complicated. The Public Staff does not necessarily disagree with Duke's procedure, but has asked for an opportunity to review it with Duke to make sure that it is as accurate as possible. Duke has agreed to discuss the allocation methodology with the Public Staff, and a different methodology may be proposed in Duke's 2012 REPS rider proceeding.

The Commission notes that the parties are not currently in disagreement on how to allocate EE and SEPA RECs. Because Duke might need to use these RECs toward its 2012 REPS obligations, the Commission finds that it is appropriate for Duke and the Public Staff to continue discussing the matter, with the goal of reaching full agreement on an allocation method that is as accurate as possible. The Commission notes further that G.S. 62-133.8 does not allow Duke to use SEPA RECs towards the Company's REPS obligations. Nor does G.S. 62-133.8 allow any entity other than Duke to use its EE RECs toward their REPS obligations. Therefore, all SEPA RECs should be allocated toward the wholesale customers and all EE RECs should be allocated toward Duke's retail customers.

IT IS, THEREFORE, ORDERED as follows:

1. That Duke shall establish a REPS rider as described herein, in the amounts approved herein, and that this rider shall remain in effect for a 12-month period beginning on September 1, 2011, and expiring on August 31, 2012;
2. That Duke shall establish a REPS EMF rider as described herein, in the amounts approved herein, and that this rider shall remain in effect for a 12-month period beginning on September 1, 2011, and expiring on August 31, 2012;
3. That Duke shall file appropriate rate schedules and riders with the Commission in order to implement the provisions of this Order as soon as practicable, but no later than five (5) days after the date of this Order;
4. That Duke shall work with the Public Staff to prepare a joint notice to customers of the rate changes ordered by the Commission in this docket, as well as in Docket No. E-7, Sub 982, and the Company shall file such notice for Commission approval as soon as practicable, but not later than five (5) days after the date of this Order;
5. That Duke's 2010 REPS compliance report is hereby approved;

6. That Duke shall demonstrate in its next REPS rider application that its 2010 Solar DG program cost calculations were based on the actual in-service dates of its solar facilities;

7. That Duke and the Public Staff are encouraged to continue their discussions concerning the allocation of the costs between retail and wholesale customers, particularly with respect to the treatment of EE RECs and SEPA RECs; and

8. That Duke is encouraged to review and appropriately reduce the confidential portions of its future REPS filings.

ISSUED BY ORDER OF THE COMMISSION.

This the 23<sup>rd</sup> day of August, 2011.

NORTH CAROLINA UTILITIES COMMISSION

A handwritten signature in cursive script that reads "Linnetta Threatt". The signature is written in black ink and is positioned above the printed name.

Linnetta Threatt, Clerk

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