

**OFFICIAL COPY**

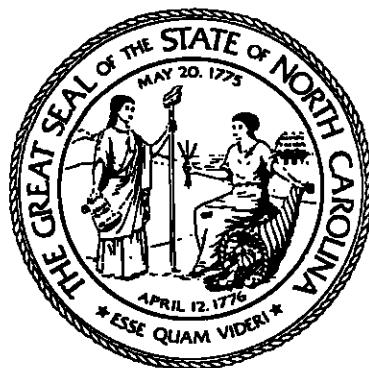
**FILED**

**OCT 01 2010**

Clerk's Office  
N.C. Utilities Commission

*E-100 Sub 113*

**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  
RENEWABLE ENERGY AND  
ENERGY EFFICIENCY  
PORTFOLIO STANDARD  
IN NORTH CAROLINA**



**October 1, 2010**



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

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

October 1, 2010

Honorable Beverly Perdue, Governor  
Office of the Governor  
20301 Mail Service Center  
Raleigh, NC 27699-0301

Jeff Hudson, Commission Counsel  
Environmental Review Commission  
Legislative Office Building  
Raleigh, North Carolina 27611

Steven J. Rose, Committee Counsel  
Joint Legislative Utility Review Committee  
Legislative Office Building  
Raleigh, North Carolina 27611

Dear Governor Perdue and Gentlemen:

The North Carolina Utilities Commission hereby presents for your consideration its 2010 Annual Report on the Renewable Energy and Energy Efficiency Portfolio Standard (REPS) in North Carolina. The Commission makes this report to the Governor of North Carolina and to the members of the Environmental Review Commission and the Joint Legislative Utility Review Committee of the General Assembly pursuant to G.S. 62-133.8(j).

I understand that legislative counsel will distribute copies to the members of the Environmental Review Commission and the Joint Legislative Utility Review Committee. Thank you for your assistance.

Very truly yours,

A handwritten signature in cursive script that reads "Edward S. Finley, Jr.".

Edward S. Finley, Jr.  
Chairman

ESF/LSW

Copies of the Annual Report of the North Carolina Utilities Commission Regarding Renewable Energy and Energy Efficiency Portfolio Standard in North Carolina have been mailed or delivered by hand or electronically to the following:

The Honorable Walter Dalton, Lieutenant Governor

The Honorable Marc Basnight, President Pro Tem of the Senate

The Honorable Joe Hackney, Speaker of the House of Representatives

Members of the Environmental Review Commission

Members of the Joint Legislative Utility Review Committee

Mr. Robert P. Gruber, Executive Director  
North Carolina Utilities Commission, Public Staff

Ms. Margaret A. Force, Assistant Attorney General  
North Carolina Department of Justice - Consumer Protection/Utilities

Ms. Jennifer L. Bumgarner, Assistant Secretary for Energy  
North Carolina Department of Commerce

Mr. Ward Lenz, Director, Energy Division  
North Carolina Department of Commerce

Progress Energy Carolinas, Inc.

Duke Energy Carolinas, LLC

Dominion North Carolina Power

North Carolina Electric Membership Corporation

ElectriCities of North Carolina, Inc.

North Carolina State Publications Clearinghouse  
Documents Branch, State Library of North Carolina

# TABLE OF CONTENTS

---

EXECUTIVE SUMMARY .....	1
BACKGROUND .....	11
COMMISSION IMPLEMENTATION.....	12
Rulemaking Proceeding .....	12
Renewable Energy Facilities.....	21
North Carolina Renewable Energy Tracking System (NC-RETS).....	25
Environmental Impacts.....	27
ELECTRIC POWER SUPPLIER COMPLIANCE.....	28
Monitoring of Compliance with REPS Requirement.....	28
Cost Recovery Rider .....	29
Electric Public Utilities .....	30
Electric Membership Corporations and Municipally-Owned Electric Utilities.....	36
CONCLUSIONS.....	41



## **APPENDICES**

- 1. Docket No. E-100, Sub 113, In the Matter of Rulemaking Proceeding to Implement Session Law 2007-397**
  - Order on Motion for Clarification (January 20, 2010)**
  - Order on Withdrawal of Joint Motion, Issuance of Joint Request for Proposals, and Allocation of Aggregate Swine Waste Set-Aside Requirement (February 12, 2010)**
  - Order on Pro Rata Allocation of Aggregate Swine and Poultry Waste Set-Aside Requirements and Motion for Clarification (March 31, 2010)**
  - Order on Joint Motion to Approve Collaborative Activity Regarding Poultry Waste Set-Aside Requirement (June 25, 2010)**
  - Order Requesting Comments on Modifications to Rules R8-64 Through R8-69 and Interim Operating Procedures (August 3, 2010)**
  - Order Requesting Comments on Measurement and Verification of Reduced Energy Consumption (August 24, 2010)**
  - Order Requesting Comments on Use of Thermal RECs to Satisfy Poultry Waste Set-Aside Requirement (August 25, 2010)**
  - Order Convening Working Group on Unmetered Solar Thermal RECs (August 25, 2010)**
  - Letter from Chairman Edward S. Finley, Jr., North Carolina Utilities Commission, to Secretary Dee Freeman, North Carolina Department of Environment and Natural Resources (August 31, 2010)**
  - 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 (September 3, 2010)**

## **2. Miscellaneous Dockets**

- Order Accepting Registration of New Renewable Energy Facility, Docket No. SP-297, Sub 0 (June 19, 2008)
- Order on Request for Declaratory Ruling, Docket No. SP-100, Sub 23 (March 25, 2009)
- Order Accepting Registration of New Renewable Energy Facility, Docket No. SP-410, Sub 0 (June 15, 2009)
- Order Issuing Amended Certificates, Accepting Registration Statement, and Issuing Declaratory Ruling, Docket No. SP-165, Sub 3 (December 17, 2009)
- Order Accepting Registration of New Renewable Energy Facility, Docket No. SP-578, Sub 0 (January 20, 2010)
- Order on Request for Declaratory Ruling, Docket No. SP-100, Sub 25 (February 24, 2010)
- Order Consolidating Dockets, Scheduling Evidentiary Hearing and Oral Argument, and Establishing Discovery Guidelines, Docket No. E-7, Subs 939 and 940 (April 27, 2010)
- Order Accepting Registration of New Renewable Energy Facility, Docket No. RET-10, Sub 0 (July 21, 2010)
- Order Approving REPS and REPS EMF Riders, Docket No. E-7, Sub 936 (August 13, 2010)

## **3. Renewable Energy Facility Registrations**

# EXECUTIVE SUMMARY

---

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 no later than October 1 of each year to the Governor, the Environmental Review Commission, and the Joint Legislative Utility Review Committee on the activities taken by the Commission to implement, and by electric power suppliers to comply with, the REPS 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 issued since October 1, 2009:

- On January 20, 2010, the Commission issued an Order in response to a Motion for Clarification filed by Green Energy Solutions NC, Inc. (GES), in Docket No. E-100, Sub 113 concluding that, when methane gas is produced by the anaerobic digestion of poultry or swine waste and other organic material, only renewable energy certificates (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 set-aside requirements.
- On February 12, 2010, at the request of a group including most of the State's electric power suppliers, the Commission issued an Order in Docket No. E-100, Sub 113 approving the issuance of a joint request for proposals (RFP) as a reasonable means for the electric power suppliers to work together collectively to meet the swine waste resource set-aside requirement. The Commission further allowed the electric power suppliers to withdraw their requests to (1) delay the

poultry waste set-aside requirement of G.S. 62-133.8(f); (2) reduce the poultry waste set-aside requirement; and (3) declare that it is not in the public interest for the electric power suppliers to purchase electricity from a renewable generation facility unless the proposed prices are fixed or contain reasonable price risk mitigation.

- On March 31, 2010, the Commission issued an Order in Docket No. E-100, Sub 113 approving a pro rata allocation mechanism proposed by most of the State's electric power suppliers as a reasonable and appropriate means for the electric power suppliers to meet the aggregate swine and poultry waste set-aside obligations of G.S. 62-133.8(e) and (f).
- On June 25, 2010, the Commission issued an Order in Docket No. E-100, Sub 113 approving, as was done earlier with regard to aggregate swine waste set-aside requirement, collaborative efforts among a group of electric power suppliers as a reasonable means to collectively meet the poultry waste set-aside requirement.
- On August 13, 2010, in Docket No. E-7, Sub 936, the Commission approved the 2009 REPS compliance report filed by Duke Energy Carolinas, LLC (Duke), concluding that a municipal electric power supplier or electric membership corporation (EMC) shall be permitted to use the total annual amount of energy supplied by the Southeastern Power Administration (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).

In addition, the Commission recently issued three orders requesting comments in Docket No. E-100, Sub 113, including: (1) an August 3, 2010 Order requesting comments on proposed modifications to Commission Rules R8-64 through R8-69; (2) an August 24, 2010 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; (3) an August 25, 2010 Order requesting comments on whether RECs associated with the thermal energy output of a combined heat and power (CHP) facility which uses poultry waste as a fuel may be used to meet the poultry waste set-aside requirement, G.S. 62-133.8(f) and, if not, whether the Commission should exercise its discretionary authority pursuant to G.S. 62-133.8(i)(2) (the off-ramp) to allow such RECs to be used for that purpose. Lastly, the Commission issued an Order on August 25, 2010, in Docket No. E-100, Sub 113 requesting the Public Staff to 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.

### *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 September 30, 2010, the Commission has accepted registration statements filed by 172 facilities.

To date, the Commission has issued a number of orders addressing issues related to the registration of a facility, including the definition of "renewable energy resource," including the following:

- On June 19, 2008, in Docket No. SP-297, Sub 0, the Commission accepted registration as a new renewable energy facility of 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.
- On March 25, 2009, in Docket No. SP-100, Sub 23, the Commission issued an Order in response to a Request for Declaratory Ruling concluding that the percentage of refuse-derived fuel (RDF) that is determined by testing to be biomass and the synthesis gas (Syngas) derived therefrom are "renewable energy resources" as defined by G.S. 62-133.8(a)(8).
- On June 15, 2009, in Docket No. SP-410, Sub 0, the Commission accepted registration as a new renewable energy facility of 2.4 kW electric generating facility to be located in Wake County, North Carolina, and fueled by ethanol derived from 100% renewable organic materials.
- On December 17, 2009, in Docket No. SP-165, Sub 3, the Commission accepted registration as new renewable energy facilities of two coal-fired facilities being converted to burn a fuel mix of coal, wood waste, and tire-derived fuel (TDF), concluding that the portion of the TDF that is derived from natural rubber, an organic material, meets the definition of biomass.

- On January 20, 2010, in Docket No. SP-578, Sub 0, the Commission accepted registration as a new renewable energy facility of a 1.628 MW combined heat and power (CHP) facility to be located in Darlington County, South Carolina, and fueled by methane gas produced via anaerobic digestion of poultry litter mixed with other organic, biodegradable materials, concluding that the thermal energy that is used as an input back into the anaerobic digestion process is not eligible for RECs, but that the thermal energy that is used to heat the chicken houses is eligible to earn RECs.
- On February 24, 2010, in Docket No. SP-100, Sub 25, the Commission issued an Order in response to a Request for Declaratory Ruling that biosolids produced at a wastewater treatment facility are biological in origin and, therefore, are a "biomass resource" and a renewable energy resource pursuant to G.S. 62-133.8(a)(8).
- On July 21, 2010, in Docket No. RET-10, Sub 0, the Commission accepted registration as a new renewable energy facility of a solar thermal hot water heating facility located in Mecklenburg County, North Carolina, used to heat two commercial swimming pools, concluding that, as an unmetered solar thermal facility, any RECs earned are not eligible to meet the solar set-aside requirement of G.S. 62-133.8(d).

Lastly, the Commission has held an evidentiary hearing and heard oral arguments in Docket No. E-7, Subs 939 and 940 regarding whether chipped whole trees qualify as a renewable energy resource and the energy produced may be used to meet the REPS requirements. A final order in this matter is pending.

### *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 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.

All of the State's electric power suppliers have registered with NC-RETS, as have a number of owners of renewable energy facilities. NC-RETS users have successfully created RECs associated with renewable energy generation and reduced energy consumption from the implementation of energy efficiency programs, and the electric power suppliers will use the system to demonstrate compliance with the 2010 REPS solar set-aside requirement.

Members of the public can access extensive information regarding REPS activities and NC-RETS account holders through the NC-RETS web site, [www.ncrets.org](http://www.ncrets.org). Interested stakeholders may participate in the NC-RETS stakeholder group, which provides a forum for resolution of issues and discussion of system improvements.

### *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 provision of Senate Bill 3. DENR noted that no renewable energy facility has progressed far enough in the permitting process to generate public comment on the individual project. DENR further noted that the Environmental Management Commission has continued to review the direct, secondary, and cumulative environmental impacts of various renewable energy technologies, and transmitted a report entitled "Forest Resource Impacts of the Woody Biomass Industry in North Carolina" to the Environmental Review Commission of the General Assembly in March 2010.

## **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, beginning in 2010, each electric power supplier must meet a certain percentage of its prior year's retail electric sales with solar RECs from certain solar facilities.

### *Monitoring of 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 actual progress toward 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 2010 REPS compliance plan, PEC indicated that its overall compliance plan is to meet the REPS requirements with the most cost effective and reliable renewable 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 thirty-six (36) contracts for solar, hydro, biomass, landfill gas, and wind RECs. In its 2009 REPS compliance report, filed on May 18, 2010, in Docket No. E-2, Sub 974, PEC indicated 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 2013.

On November 12, 2009, the Commission issued an Order in Docket No. E-2, Sub 948 approving an REPS charge of \$0.65 per month for residential customers, \$3.22 per month for commercial customers, and \$32.20 per month for industrial customers. On June 4, 2010, PEC filed an application in Docket No. E-2, Sub 974 seeking to decrease its REPS rider to \$0.60 per month for residential customers, \$3.02 per month for commercial customers, and \$30.23 per month for industrial customers. A hearing was held on PEC's 2009 REPS compliance report and REPS cost recovery rider on September 22, 2010, and a final decision is pending before the Commission.



### Duke Energy Carolinas, LLC

In its 2010 REPS compliance plan, Duke stated that it is pursuing REPS compliance by 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 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 energy efficiency 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 stated that it is confident that it will meet its 2010 REPS solar set-aside requirement, electing 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.

On March 2, 2010, in Docket No. E-7, Sub 936, Duke filed an application for approval of an REPS rider effective September 1, 2010. On August 13, 2010, the Commission issued an Order approving an REPS charge of \$0.27 per month for residential customers, \$1.32 per month for commercial customers, and \$13.21 per month for industrial customers.

### Dominion North Carolina Power

In its 2010 REPS compliance plan, Dominion stated that it intends to meet its REPS requirements through the use of new renewable energy, energy efficiency, and unbundled RECs. Dominion currently plans to use unbundled solar RECs to meet its 2010 and 2011 solar set-aside requirements (816 and 820 MWh, respectively). 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. It 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. Lastly, Dominion recently filed for approval by the Commission of four energy efficiency programs. Dominion projects energy efficiency savings of 8,456 MWh in 2011 and 10,395 MWh in 2012 from these programs. Dominion expects to file its first application for approval of an REPS rider in 2011.

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

There are thirty-one (31) EMCs serving customers in North Carolina, including twenty-six (26) that are headquartered in the state. Twenty-five of the EMCs are members of 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 NCEMPA or NCMPA1, municipal power agencies that provide wholesale power to their members. The remaining municipally-owned electric utilities purchase their own 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.

The Commission received 2010 REPS compliance plans and 2009 REPS compliance reports filed by GreenCo, on behalf of its members, and EnergyUnited Electric Membership Corporation (EnergyUnited). The Commission approved a request by Tennessee Valley Authority (TVA) to file an aggregated REPS compliance plan and REPS compliance report on behalf of its four wholesale customer 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. In addition, GreenCo agreed to aggregate the REPS compliance obligations for two cooperatives that serve retail customers in North Carolina, but that are headquartered out-of-state: Mecklenburg Electric Cooperative, headquartered in Chase, Virginia, and Broad River Electric Cooperative, headquartered in Gaffney, South Carolina.

On September 1, 2010, GreenCo filed its 2010 REPS compliance plan and 2009 REPS compliance report with the Commission on behalf of its member EMCs. In its plan, GreenCo stated that it intends to use its members' allocations from the Southeastern Power Administration (SEPA), RECs provided by both in-State and out-of-state renewable energy facilities, and energy efficiency savings from eleven recently approved programs to meet its members' REPS obligations. GreenCo further stated that it plans to evaluate the potential of other energy efficiency programs to provide energy savings that could be utilized for REPS compliance. GreenCo indicated that it has secured adequate resources to meet the solar set-aside obligation for 2010 and 2011. Lastly, for 2009, 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). On August 24, 2010, in Docket No. EC-83, Sub 1, the Commission held a hearing to consider the 2008 REPS compliance report filed by GreenCo. Proposed orders and briefs are due to be filed in October.

On August 27, 2010, EnergyUnited Electric Membership Corporation (EnergyUnited) filed its 2010 IRP and REPS compliance plan with the Commission. In its plan, EnergyUnited stated that it plans to meet its solar set-aside obligation through 2015 through a purchase from a 1 MW solar farm being

---

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

constructed by SunEdison that will begin operating in September 2010. 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 obligations. EnergyUnited is currently in discussions with third parties regarding its obligations under the swine and poultry waste set-asides, and will continue to evaluate options for the most cost-effective means to meet these requirements. EnergyUnited further stated that it plans to continue deployment of its current energy efficiency programs to its members as well as continue to educate its members on energy efficiency. The Commission canceled a hearing scheduled for August 17, 2010, in Docket No. EC-82, Sub 12 to consider EnergyUnited's 2008 REPS compliance report. EnergyUnited filed a revised 2008 REPS compliance report and 2009 REPS compliance report together with its 2010 IRP on August 27, 2010.

The Commission granted TVA and Halifax Electric Membership Corporation extensions of time until October 15, 2010, within which to file their 2010 REPS compliance plans and 2009 REPS compliance reports.

In addition, the Commission received 2010 REPS compliance plans and 2009 REPS compliance reports filed by NCEMPA and NCMPA1, on behalf of their members. In its plan, NCEMPA stated its members will meet approximately 27% of their REPS requirements pursuant to G.S. 62-133.8(c)(2)(e) through purchases of supplemental energy from PEC. 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 a contract to purchase RECs, and will continue to investigate the market for unbundled RECs as a cost-effective means of REPS compliance. Lastly, NCEMPA reiterated that it is prohibited from purchasing power to meet the REPS set-aside requirements, including its 2010 REPS solar set-aside requirement, but that it is pursuing opportunities to purchase in-state and out-of-state unbundled RECs generated from solar resources, including solar thermal. NCEMPA is participating jointly with other electric power suppliers to meet the aggregate swine and poultry waste set-aside requirements beginning in 2012. NCEMPA estimates that its incremental costs for REPS compliance will exactly equal its per-account cost cap in each of the next three years. On August 3, 2010, in Docket No. E-48, Sub 6, the Commission held a hearing to consider NCEMPA's 2008 REPS compliance report. Proposed orders and briefs are due to be filed in October.

NCMPA1, in its plan, 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. In order to meet its 2010 REPS solar set-aside requirement, NCMAPA1 intends to identify development opportunities for solar facilities to be located within its members' service areas or at municipal customer locations; evaluate potential solar applications resulting from energy audits of its members' facilities and those of their customers; consider incentives for customers to install or convert to solar thermal water heating facilities; continue refinement of existing renewable energy and REC standard offer program; continue to receive energy and RECs from its power purchase agreement with a solar facility in Shelby, North Carolina; and investigate various other regional supply-side options. NCMAPA1 is participating jointly with other electric power suppliers to meet the aggregate swine waste set-aside requirement beginning in 2012, and has entered into an agreement to purchase a combination of biomass and poultry litter RECs. On July 27, 2010, in Docket No. E-43, Sub 6, the Commission held a hearing to consider NCMAPA1's 2008 REPS compliance report. Proposed orders and briefs were filed in September.

The Commission granted the towns of Winterville and Oak City, Fayetteville Public Works Commission, and TVA (on behalf of Murphy Electric Board) extensions of time until October 15, 2010, with which to file their 2010 REPS compliance plans and 2009 REPS compliance reports.

As further noted above, 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 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.

## **Conclusions**

As stated in the 2009 Report and as highlighted again in this report, numerous issues have arisen 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

---

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 in 2012 at 3% of retail electricity sales, 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 Utility Review Committee. 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.

On October 1, 2008, the Commission made its first annual report pursuant to G.S. 62-133.8(j),<sup>2</sup> and last year, on October 1, 2009, the Commission made its second annual report.<sup>3</sup> The remaining sections of this report detail, as required by the General Assembly, the activities undertaken by the Commission during the past year to implement, and by the electric power suppliers to comply with, G.S. 62-133.8, the REPS provision of Senate Bill 3.

---

<sup>2</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>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, 2009 (2009 REPS Report).

# COMMISSION IMPLEMENTATION

---

## 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 2009 RPS 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, but that the university-owned electric suppliers, Western Carolina University and New River Light & Power Company, are not subject to the REPS requirement of Senate Bill 3.
- 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 that they 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).

During the past year, the Commission has issued a number of additional orders interpreting various provisions of Senate Bill 3, as described below.

#### ***Order on Motion for Clarification (January 20, 2010)***

On January 8, 2010, Green Energy Solutions NC, Inc. (GES), filed a motion for clarification in Docket No. E-100, Sub 113 noting that the company's process for producing methane gas involves the anaerobic digestion of swine or poultry waste as well as "other biodegradable material," and requesting clarification as to whether all of the electrical output produced by the resulting methane is eligible to count toward the REPS swine or poultry waste set-aside obligations.

By Order dated January 20, 2010, the Commission concluded that not all of the methane gas produced in the manner GES described would qualify toward the REPS poultry or swine waste set-aside requirements because the "other organic, biodegradable material" that GES mixes with the poultry or swine waste is responsible for some percentage of the resulting methane gas. Consistent with its decision in the May 7, 2009 Order on Duke Energy Carolinas, LLC (Duke), Motion for Clarification, 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 set-aside requirements.

***Order on Withdrawal of Joint Motion, Issuance of Joint Request for Proposals, and Allocation of Aggregate Swine Waste Set-Aside Requirement (February 12, 2010)***

On August 14, 2009, Progress Energy Carolinas, Inc. (PEC); 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) filed a Joint Motion in Docket No. E-100, Sub 113 requesting that the Commission modify the swine and poultry waste resource set-aside requirements, G.S. 62-133.8(e) and (f), and clarify the obligations thereunder. Specifically, the six Electric Suppliers requested that the Commission (1) delay the poultry waste set-aside requirement by one year and reduce the requirement by two-thirds; (2) delay the swine waste set-aside requirement by one year; and (3) declare that it is not in the public interest for an electric power supplier to buy electricity from a renewable generating facility unless the contract terms include fixed prices or other price risk mitigation provisions. Four of the Electric Suppliers – Dominion, Duke, NCEMC and PEC – also requested that the Commission modify the poultry waste set-aside requirement to require an electric power supplier to meet only a pro rata share of the total obligation.

On December 16, 2009, the Electric Suppliers filed to withdraw the Joint Motion with regard to their requests that the Commission: (1) delay the poultry waste set-aside requirement of GS 62-133.8(f); (2) reduce the poultry waste set-aside requirement; and (3) declare that it is not in the public interest for the Electric Suppliers to purchase electricity from a renewable generation facility unless the proposed prices are fixed or contain reasonable price risk mitigation. The Electric Suppliers further requested that the Commission delay ruling on the pro rata allocation issue until they had submitted a settlement agreement for Commission approval.

On January 22, 2010, PEC filed a letter on behalf of the Electric Suppliers stating that they had met with swine waste generation parties and agreed that *they would submit for Commission approval (1) an agreement for the pro rata allocation of the aggregate statewide swine waste resource set-aside obligation among the State's electric power suppliers and (2) a generic request for proposals (RFP) from swine waste generators.* The letter stated that the RFP would contain a date by which all bids would be submitted and that the Electric Suppliers and swine waste generation parties, after reviewing the bids, would determine the number of megawatt-hours and/or renewable energy certificates (RECs) that can realistically be produced by 2012. If the number of megawatt-hours and/or RECs is less than the 2012 requirement, the parties will jointly petition the Commission to reduce the 2012 requirement in GS 62-133.8(e) to a level that can realistically be achieved.



On January 29, 2010, PEC filed the joint swine waste resource RFP on behalf of itself, Dominion, Duke, NCEMPA, NCMPA1, and GreenCo Solutions, Inc. (GreenCo), for approval by the Commission. On February 5, 2010, PEC filed a proposed mechanism to allocate between and among the State's electric power suppliers the statewide aggregate poultry waste and swine waste set-aside requirements established by G.S. 62-133.8(e) and (f).

By Order dated February 12, 2010, the Commission allowed the Electric Suppliers to withdraw their requests in the Joint Motion that the Commission: (1) delay the poultry waste set-aside requirement of GS 62-133.8(f); (2) reduce the poultry waste set-aside requirement; and (3) declare that it is not in the public interest for the Electric Suppliers to purchase electricity from a renewable generation facility unless the proposed prices are fixed or contain reasonable price risk mitigation. The Commission further concluded that issuance of the joint RFP is reasonable as a means for the electric power suppliers to work together collectively to meet the swine waste resource set-aside requirement and approved its issuance for purposes of the state action immunity doctrine. Lastly, the Commission allowed parties to file comments on the proposed mechanism for allocating the aggregate swine and poultry waste resource set-aside obligations among the electric power suppliers.

***Order on Pro Rata Allocation of Aggregate Swine and Poultry Waste Set-Aside Requirements and Motion for Clarification (March 31, 2010)***

On August 14, 2009, PEC, Duke, Dominion, and NCEMC filed a Joint Motion in Docket No. E-100, Sub 113 requesting that the Commission modify the poultry waste set-aside requirement to require an electric power supplier to meet only a pro rata share of the total obligation.

On February 5, 2010, PEC filed a proposed mechanism to allocate between and among the State's electric power suppliers the statewide aggregate poultry waste and swine waste set-aside requirements established by G.S. 62-133.8(e) and (f) (Proposed Pro Rata Mechanism). In summary, the Proposed Pro Rata Mechanism provides (1) that the statewide aggregate swine and poultry waste set-aside requirements shall 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 total retail sales; (2) that 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) that 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) that, upon approval of the Commission, the 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.

PEC stated that the Proposed Pro Rata Mechanism was supported by Dominion, Duke, PEC, GreenCo, NCEMC, NCSEA, North Carolina Pork Council (NCPC), Fibrowatt LLC (Fibrowatt), Green Energy Solutions NV, Inc. (GES), the Attorney General and the Public Staff. PEC stated that Electricities of North Carolina, Inc. (Electricities), did not support the Proposed Pro Rata Mechanism as written.

On February 12, 2010, the Commission issued an order noting that the proposed pro rata allocation of the aggregate swine and poultry waste resource set-aside obligations had wide, but not unanimous support among the electric power suppliers, and allowing parties to file comments on this issue.

In their joint comments, NCEMPA and NCMPA1 (jointly, the Power Agencies) stated that they do not disagree that the Proposed Pro Rata Mechanism provides clarity not otherwise provided by the REPS legislation. However, the Power Agencies objected to any amendment or rewriting of the swine and poultry waste set-aside requirements by the Commission. The Power Agencies noted that, had the legislature intended for the swine and poultry waste set-aside requirements to apply individually to each electric power supplier, it could have omitted the phrase "in the aggregate" from these provisions as it did with the solar set-aside requirement. Notwithstanding these objections, the Power Agencies stated that they would join in, and waive any objections to, the Proposed Pro Rata Mechanism if the Commission clarified its holding in the May 7, 2009 Order on Duke Energy Carolinas, LLC, Motion for Clarification. In that Order, the Commission determined that the set-aside requirements 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).

By Order dated March 31, 2010, the Commission issued an Order agreeing with the Power Agencies that the General Assembly established an aggregate obligation for the swine and poultry waste set-aside requirements different from the solar set-aside requirement. The Commission further noted, however, that such an arrangement had proven to be unworkable as no agreement had been reached among the electric power suppliers to allow these set-aside requirements to be met. The Commission, therefore, approved the allocation mechanism selected by most of the State's electric power suppliers, the Proposed Pro Rata Mechanism, as a reasonable and appropriate means for the electric power suppliers to meet the aggregate swine and poultry waste set-aside obligations of G.S. 62-133.8(e) and (f). In response to the Power Agencies' arguments, the Commission reiterated its earlier holding that the set-aside requirements, as demonstrated by their 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.

***Order on Joint Motion to Approve Collaborative Activity Regarding Poultry Waste Set-Aside Requirement (June 25, 2010)***

On May 24, 2010, PEC, Dominion, NCEMC, NCEMPA, NCMPA1, EnergyUnited Electric Membership Corporation, Halifax Electric Membership Corporation, GreenCo, and Fayetteville Public Works Commission (jointly, the Movants) filed a Joint Motion in Docket No. E-100, Sub 113 requesting Commission approval to jointly procure and/or engage in collaborative efforts to obtain renewable energy or renewable energy certificates (RECs) to satisfy the poultry waste resource set-aside requirement, G.S. 62-133.8(f). In support of the Joint Motion, the Movants stated that, since the Commission's March 31, 2010, approval of the pro rata mechanism for allocating the statewide aggregate swine and poultry waste set-aside requirements, they had determined that the most efficient, equitable and productive means for each to procure their pro rata allocated share of the poultry waste set-aside requirement was to collaborate in the evaluation of the various poultry waste generation technologies and the joint procurement of poultry waste generated renewable energy. As provided in the Commission's May 7, 2009 Order in this docket, the Movants sought Commission approval to (a) share the poultry waste generation bids they have received with the other Movants; (b) enter into joint agreements with poultry waste generators to purchase renewable energy and RECs; and (c) otherwise engage in collaborative activity to comply with the poultry waste set-aside requirement.

By Order dated June 25, 2010, the Commission concluded that, as earlier approved with regard to aggregate swine waste set-aside requirement, the collaborative efforts proposed in the Joint Motion are reasonable as a means for the Movants to work together collectively to meet the poultry waste set-aside requirement and approved such efforts for purposes of the state action immunity doctrine.

***Order Requesting Comments on Modifications to Rules R8-64 Through R8-69 and Interim Operating Procedures (August 3, 2010)***

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 themselves. Written comments were filed on or about March 1, 2010, and reply comments were filed by several parties 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 in response to this Order on or before 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 shortly 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 are due to be filed with the Commission in October.

#### ***Order Approving REPS and REPS EMF Riders (August 13, 2010)***

On March 2, 2010, in Docket No. E-7, Sub 936, Duke filed its 2009 REPS compliance report and REPS rider application seeking to recover the incremental costs incurred in order to comply with the REPS requirements of Senate Bill 3. In its 2009 REPS compliance report, Duke credited the wholesale entities for which it provides REPS compliance services for their respective allocations from the Southeastern Power Administration (SEPA). The Public Staff objected with regard to SEPA, noting that the bills received by Duke's wholesale customers from SEPA separately identify the sources of power provided by SEPA each month as stream flow, pumping operations or replacement energy. The Public Staff argued that the power from pumping operations and replacement energy supplied by SEPA to Duke's wholesale customers do not constitute "electric power from a renewable energy facility or a hydroelectric power facility" within the meaning of this paragraph and may not be used to satisfy the REPS requirement.

By Order dated August 13, 2010, the Commission approved the 2009 REPS compliance report and REPS riders. With regard to the SEPA issue, the Commission found that "allocations" from SEPA is used as a term of art in

G.S. 62-133.8(c)(2)(c) and, therefore, concluded that a municipal electric power supplier or electric membership corporation (EMC) shall 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).

***Order Requesting Comments on Measurement and Verification of Reduced Energy Consumption (August 24, 2010)***

On August 24, 2010, the Commission issued an Order in Docket No. E-100, Sub 113 expressing concerns that its 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 and/or demand-side management 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 kind of 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 kind of 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. Comments are due to be filed with the Commission in October, and reply comments are due to be filed in November.

***Order Requesting Comments on Use of Thermal RECs to Satisfy Poultry Waste Set-Aside Requirement (August 25, 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, 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, G.S. 62-133.8(i)(2), to allow thermal RECs to be used to satisfy the poultry waste set-aside requirement, G.S. 62-133.8(f). 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, G.S. 62-133.8(f). Comments and reply comments were filed in September, and the Commission's decision is pending.

***Order Convening Working Group on Unmetered Solar Thermal RECs  
(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.

## **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 certification or report of proposed construction and 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 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 September 30, 2010, the Commission has accepted registration statements filed by 172 facilities, a list of which is provided in Appendix 3.

To date, 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 described below.

### ***Order Accepting Registration of New Renewable Energy Facility, Docket No. SP-297, Sub 0 (June 19, 2008)***

On May 19, 2008, Orbit Energy, Inc. (Orbit), filed a registration statement in Docket No. SP-297, Sub 0 for 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. By Order dated June 19, 2008, the Commission accepted registration of the biomass-fueled new renewable energy facility.

***Order on Request for Declaratory Ruling, Docket No. SP-100, Sub 23  
(March 25, 2009)***

On February 23, 2009, Solid Recovered Fuel, LLC (SRF), filed a request for a declaratory ruling that (1) refuse-derived fuel (RDF) and RDF synthesis gas (Syngas) to be produced by SRF, as described in the petition, are "renewable energy resources" as defined by G.S. § 62-133.8(a)(8); (2) SRF's delivery of Syngas from a co-located gasifier to an electric utility boiler would not make SRF a "public utility" as defined in G.S. § 62-3(23); and (3) SRF'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).

SRF asserted in its petition that RDF is a widely-recognized fuel source consisting of segregated components of municipal solid waste (MSW). To generate RDF, MSW undergoes various processing steps, including shredding and screening, to segregate the fuel fraction of the MSW stream from other residual materials. Materials that can be recycled are sorted and removed, and non-combustible materials are removed and shipped to a landfill. The fuel portion that remains constitutes the RDF. The RDF is then transported to a gasifier and converted into Syngas using a fluidized bed technology. The Syngas leaving the gasifier would be delivered through piping to the boiler of an electric generating facility to be co-fired with coal or other fossil fuels.

By Order dated March 25, 2009, the Commission granted SRF's petition. With regard to RDF and Syngas, the Commission concluded that the percentage of RDF that is determined by testing to be biomass, as specifically described in SRF's petition and subject to verification of the testing procedures and results, as appropriate, and the Syngas produced from that RDF is a "renewable energy resource" as defined in G.S. 62-133.8(a)(8).

***Order Accepting Registration of New Renewable Energy Facility, Docket No. SP-410, Sub 0 (June 15, 2009)***

On March 12, 2009, Matthew H. Keil filed a registration statement in Docket No. SP-410, Sub 0 for a 2.4 kW electric generating facility to be located at his home in Wake County, North Carolina, and fueled by ethanol derived from 100% renewable organic materials. By Order dated June 15, 2009, the Commission accepted registration of the biomass-fueled new renewable energy facility.



***Order Issuing Amended Certificates, Accepting Registration Statement, and Issuing Declaratory Ruling, Docket No. SP-165, Sub 3 (December 17, 2009)***

On October 21, 2009, EPCOR USA North Carolina, LLC (EPCOR), subsequently renamed CPI USA North Carolina, LLC, filed (1) an application for the issuance of amended certificates of public convenience and necessity (CPCNs) for the electric generating facilities it owns in Southport and Roxboro, North Carolina, that it was converting to burn a fuel mix of coal, wood waste, and tire-derived fuel (TDF), (2) a registration statement for the two facilities, and (3) a request that the Commission determine that TDF or, alternatively, the natural rubber portion thereof, is a renewable energy resource.

By Order dated December 17, 2009, the Commission issued the amended certificates and accepted registration of the two facilities as new renewable energy facilities. With regard to TDF, the Commission concluded that some portion of the TDF is derived from natural rubber, an organic material, meets the definition of biomass, and is eligible to earn RECs, but required EPCOR to submit additional information to demonstrate that percentage of TDF that is derived from natural rubber.

***Order Accepting Registration of New Renewable Energy Facility, Docket No. SP-578, Sub 0 (January 20, 2010)***

On December 2, 2009, Green Energy Solutions NV, Inc., (GES) filed a registration statement in Docket No. SP-578, Sub 0 for 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 the Collins Chick Farm mixed with other organic, biodegradable materials. GES further stated that the waste heat from the electric generators will provide temperature control for the methane-producing anaerobic digester as well as the chicken houses at the Collins Chick Farm.

By Order dated January 20, 2010, the Commission accepted registration of the new renewable energy facility. Noting that GES's facility will produce both electric and thermal energy, 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 at the Collins Chick Farm is eligible to earn RECs. As previously noted, the Commission issued an Order in Docket No. E-100, Sub 113 in response to a Motion for Clarification filed by GES stating 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.

***Order on Request for Declaratory Ruling, Docket No. SP-100, Sub 25  
(February 24, 2010)***

On February 3, 2010, the Water and Sewer Authority of Cabarrus County (WSACC) filed a request for a declaratory ruling that (1) biosolids, the organic material remaining after treatment of domestic sewage, combusted at WSACC's Rocky River Regional Wastewater Treatment Plant (the Rocky River facility) are a "renewable energy resource" as defined by G.S. 62-133.8(a)(8), and (2) WSACC is a "nonutility" for purposes of G.S. 62-110.1(g) and, therefore, is required to file a report of proposed construction pursuant to Commission Rule R8-65 rather than an application for a certificate of public convenience and necessity pursuant to Rule R8-64.

By Order dated February 24, 2010, the Commission concluded that biosolids produced at WSACC's Rocky River facility are biological in origin and, therefore, should be considered a "biomass resource," a renewable energy resource within the meaning of Senate Bill 3. The Commission further found that WSACC, which was organized in 1992 pursuant to the North Carolina Water and Sewer Authorities Act, is specifically exempt from regulation as public utility pursuant to G.S. 62-3(23)(d).

***Order Consolidating Dockets, Scheduling Evidentiary Hearing and Oral Argument, and Establishing Discovery Guidelines , Docket No. E-7, Subs 939 and 940 (April 27, 2010)***

On March 1, 2010, Duke Energy Carolinas, LLC (Duke), filed applications in Docket No. E-7, Subs 939 and 940 to register 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. In its registration applications, Duke stated that biomass co-firing test burns were conducted at each facility using sawdust and/or whole tree chips. Several environmental groups intervened and requested that the Commission deny or stay Duke's registrations, arguing that the whole tree woody 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, 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, and a decision in this matter is pending before the Commission.

***Order Accepting Registration of New Renewable Energy Facility, Docket No. RET-10, Sub 0 (July 21, 2010)***

On March 11, 2010, North Mecklenburg Aquatics d/b/a Nomad Aquatics & Fitness (Nomad) filed a registration statement for a solar thermal hot water heating facility located in Mecklenburg County, North Carolina, used to heat two commercial swimming pools. Nomad stated that it does not have Btu monitoring devices, although it does continuously monitor the temperature of the pools, and requested that it be allowed to earn RECs for 2008 and 2009 based upon the capacity of its solar panels.

By Order dated July 21, 2010, the Commission accepted registration of the new renewable energy facility. As an unmetered solar thermal facility, however, any RECs earned are not eligible to meet the solar set-aside requirement of G.S. 62-133.8(d). Lastly, the Commission allowed Nomad to earn 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.

**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.

On October 19, 2009, the Commission issued a request for proposals to identify a vendor to develop and administer an online REC tracking system for North Carolina. After 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 subject to the REPS requirements of Senate Bill 3 and recovered from their 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 will place the solar RECs that they acquired to meet their 2010 REPS solar set-aside obligation into a 2010 compliance account where the RECs will be available for audit. When the Commission concludes its review of each electric power suppliers' REPS compliance report, the associated RECs will be permanently retired.

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 September 9, 2010:

- NC-RETS had issued 3,770 renewable energy certificates and 1,215 energy efficiency certificates.
- 74 organizations, including electric power suppliers and owners of renewable energy facilities, had established accounts in NC-RETS.
- Approximately 50 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 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 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 noted that no renewable energy facility has progressed far enough in the permitting process to generate public comment on the individual project. DENR further noted that the Environmental Management Commission has continued to review the direct, secondary, and cumulative environmental impacts of various renewable energy technologies, and transmitted a report entitled "Forest Resource Impacts of the Woody Biomass Industry in North Carolina" to the Environmental Review Commission of the General Assembly in March 2010.

# **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, beginning in 2010, each electric power supplier must meet a certain percentage of its prior year's 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 known by 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.

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

On September 13, 2010, PEC filed its 2010 REPS compliance plan in Docket No. E-100, Sub 128 as part of its 2010 Integrated Resource Plan (IRP). In its plan, PEC indicated that its overall compliance plan is to meet the REPS requirements with the most cost effective and reliable renewable 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 thirty-six (36) contracts for solar, hydro, biomass, landfill gas, and wind RECs. PEC stated that it does not currently own or operate new renewable energy facilities; future direct or partial ownership will be based on cost-effectiveness and portfolio requirements.

With the objective of meeting the initial 0.02% requirement in 2010, PEC prioritized solar bids within its November 2007 renewable RFP and subsequent planning periods. In addition to the renewable RFP, PEC implemented a commercial solar photovoltaic (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. PEC has also

filed for Commission approval of a residential PV rebate program aimed at adding 1 MW per year of distributed solar generation.

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 are currently in negotiation with multiple short-listed parties from the RFP to procure swine waste resources available in the state. Based on analysis of the short-listed proposals, the identified projects appear capable of delivering sufficient RECs to meet the 2012 requirements of all of the state's electric power suppliers; however, the electric power suppliers remain cautious in concluding that the requirements will be met because many uncertainties remain to be addressed in contract negotiations and the subsequent project development efforts of the selected suppliers. PEC is also participating in collective efforts to procure poultry waste derived energy. Based upon the information received to date, PEC believes that its ability to meet its share of the 2012 statewide poultry requirement is promising; however, cautions that it is too early to conclude that the 2012 obligations will be met based on similar issues to those stated for swine waste energy.

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.

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

On June 4, 2009, PEC filed an application in Docket No. E-2, Sub 948 for approval of an REPS rider effective December 1, 2009. On November 12, 2009, the Commission issued an Order approving an REPS charge of \$0.65 per month for residential customers, \$3.22 per month for commercial customers, and \$32.20 per month for industrial customers.

On May 18, 2010, PEC filed its 2009 REPS compliance report in Docket No. E-2, Sub 974. On June 4, 2010, PEC filed an application in that docket seeking to decrease its REPS rider to \$0.60 per month for residential customers, \$3.02 per month for commercial customers, and \$30.23 per month for industrial customers. In its 2009 REPS compliance report, PEC indicated 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 2013. A hearing was held on PEC's 2009 REPS compliance report and REPS cost recovery rider on September 22, 2010, and a final decision is pending before the Commission.

### ***Duke Energy Carolinas***

On September 1, 2010, Duke filed its 2010 REPS compliance plan in Docket No. E-100, Sub 128 as part of its 2010 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. Specifically, 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 energy efficiency 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 projects its 2010 REPS obligation under the solar set-aside requirement, including the wholesale customers for which it is providing REPS compliance services, to total approximately 11,402 MWh, and stated that it is confident that it will meet this requirement. 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 expects for the program to be fully implemented by the end of 2010. In 2008, Duke signed a twenty-year power purchase agreement with SunEdison for the purchase of all electricity generated from a proposed 15.5 MW (AC) solar farm in Davidson County, North Carolina. The initial phase of 3.5 MW (AC) is operational, and the remaining capacity is under construction. Duke expects the solar farm to be fully operational by year-end 2010 or early 2011. Duke has also entered into a long-term agreement with FLS Energy to purchase solar RECs from water heating installations. As a result of this agreement, FLS has installed solar water heating systems at residences, hotels, universities, and commercial sites across North Carolina and is planning many more installations. 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.

Duke's primary strategy for compliance with the swine waste set-aside requirement is to jointly procure swine waste-to-energy resources with PEC and other electric power suppliers. Duke believes that compliance with the 2012 swine waste set-aside requirement is possible, as the proposals identified in the joint swine waste resource RFP appear to be capable of delivering sufficient RECs to meet the 2012 requirements of all of the electric power suppliers; however, it is too early to conclude that the 2012 targets will be met, simply because many uncertainties remain that will be addressed in negotiations and subsequent project development. In addition, Duke 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. Duke states that development of this project represents an opportunity to demonstrate a low capital cost, environmentally beneficial farmer-operated swine waste-to-energy facility that, in the future, could serve as a model for other hog farmers seeking to manage waste while also developing on-farm renewable generation. The project is expected to begin commercial operation in February 2011, and Duke will receive all of the RECs generated from this project for a period of ten years.

Duke stated that it plans to meet the poultry waste set-aside requirement through the purchase of poultry waste derived energy and/or by purchasing 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, qualified 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 poultry waste set-aside requirement, it stated that it will continue to make all reasonable efforts to meet the poultry waste 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 energy efficiency savings, hydroelectric power, biomass resources, and out-of-state wind RECs. Duke projects that, in concert with its customers, it will achieve more energy efficiency 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' Southeastern Power Administration (SEPA) allocation; and (3) small hydroelectric facilities that are not owned by Duke. Duke has purchased RECs from twenty-one (21) 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. Duke also intends to self-supply a portion of the biomass portfolio through the co-fire and/or re-power of existing coal stations with renewable fuel. Lastly, noting the downward trend in solar equipment costs over the past several years, Duke stated that it continues to investigate the addition of more solar resources for use in meeting the general REPS requirement.

On February 2, 2009, Duke filed its 2008 REPS compliance report in Docket No. E-7, Sub 872. On March 4, 2009, Duke filed an application in that docket for approval of an REPS rider effective September 1, 2009. A hearing was held on June 9, 2009, and on August 21, 2009, the Commission issued an Order Approving Cost Recovery and Directing Further Proceedings Regarding REPS Riders. On December 15, 2009, the Commission issued an Order approving an REPS charge of \$0.16 per month for residential customers, \$0.86 per month for commercial customers, and \$8.56 per month for industrial customers.

On March 2, 2010, Duke filed its 2009 REPS compliance report in Docket No. E-7, Sub 936. Together with its 2009 REPS compliance report, Duke filed an application for approval of an REPS rider effective September 1, 2010. On August 13, 2010, the Commission issued an Order approving an REPS charge of \$0.27 per month for residential customers, \$1.32 per month for commercial customers, and \$13.21 per month for industrial customers.

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

On September 1, 2010, Dominion filed its 2010 REPS compliance plan in Docket No. E-100, Sub 128 as part of its 2010 IRP. Dominion expects to file its first application for approval of an REPS rider in 2011. Dominion has agreed to provide REPS compliance services for the Town of Windsor, as allowed under G.S. 62-133.8(c)(2)(e).

In its plan, Dominion stated that it intends to meet its REPS requirements through the use of new renewable energy, energy efficiency, and unbundled RECs. Dominion currently plans to use unbundled solar RECs to meet its 2010 and 2011 solar set-aside requirements (816 and 820 MWh, respectively). 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. It 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. Lastly, Dominion recently filed for approval by the Commission four energy efficiency programs. Dominion projects energy efficiency savings of 8,456 MWh in 2011 and 10,395 MWh in 2012 from these programs.

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

There are thirty-one (31) EMCs serving customers in North Carolina, including twenty-six (26) that are headquartered in the state. Twenty-five of the EMCs are members of 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>4</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

---

<sup>4</sup> Effective May 1, 2010, Blue Ridge Electric Membership Corporation is no longer a member of GreenCo.

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.
- 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.

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

On September 1, 2010, GreenCo filed its 2010 REPS compliance plan and 2009 REPS compliance report with the Commission on behalf of its member EMCs.<sup>5</sup> In its plan, GreenCo stated that it intends to use its members' allocations from the Southeastern Power Administration (SEPA), RECs provided by both in-State and out-of-state renewable energy facilities, and energy efficiency

---

<sup>5</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.

savings from eleven recently approved programs to meet its members' REPS obligations. GreenCo further stated that it plans to evaluate the potential of other energy efficiency programs to provide energy savings that could be utilized for REPS compliance. GreenCo indicated that it has secured adequate resources to meet the solar set-aside obligation for 2010 and 2011. Lastly, for 2009, 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). On August 24, 2010, in Docket No. EC-83, Sub 1, the Commission held a hearing to consider the 2008 REPS compliance report filed by GreenCo. Proposed orders and briefs are due to be filed in October.

On August 27, 2010, EnergyUnited Electric Membership Corporation (EnergyUnited) filed its 2010 IRP and REPS compliance plan with the Commission. In its plan, EnergyUnited stated that it plans to meet its solar set-aside obligation through 2015 through a purchase from a 1 MW solar farm being constructed by SunEdison that will begin operating in September 2010. 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 obligations. EnergyUnited is currently in discussions with third parties regarding its obligations under the swine and poultry waste set-asides, and will continue to evaluate options for the most cost-effective means to meet these requirements. EnergyUnited further stated that it plans to continue deployment of its current energy efficiency programs to its members as well as continue to educate its members on energy efficiency. The Commission canceled a hearing scheduled for August 17, 2010, in Docket No. EC-82, Sub 12 to consider EnergyUnited's 2008 REPS compliance report. EnergyUnited filed a revised 2008 REPS compliance report and 2009 REPS compliance report together with its 2010 IRP on August 27, 2010.

On September 7, 2010, 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 customer 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. The Commission further granted TVA's request for an extension of time until October 15, 2010, within which to file its 2010 REPS compliance plan and 2009 REPS compliance report.

On September 14, 2010, the Commission similarly granted Halifax Electric Membership Corporation (Halifax) an extension of time until October 15, 2010, within which to file its 2010 REPS compliance plan and 2009 REPS compliance report. Halifax serves the Town of Enfield and has previously included Enfield's REPS requirement in its plan.



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

On September 1, 2010, NCEMPA and NCMPA1 filed 2010 REPS compliance plans and 2009 REPS compliance reports with the Commission on behalf of their members. In its 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 further stated that its members will meet approximately 27% of their REPS requirements pursuant to G.S. 62-133.8(c)(2)(e) through purchases of supplemental energy from PEC. 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 a contract to purchase RECs, and will continue to investigate the market for unbundled RECs as a cost-effective means of REPS compliance. Lastly, NCEMPA reiterated that it is prohibited from purchasing power to meet the REPS set-aside requirements, including its 2010 REPS solar set-aside requirement, but that it is pursuing opportunities to purchase in-state and out-of-state unbundled RECs generated from solar resources, including solar thermal. NCEMPA is participating jointly with other electric power suppliers to meet the aggregate swine and poultry waste set-aside requirements beginning in 2012. NCEMPA estimates that its incremental costs for REPS compliance will exactly equal its per-account cost cap in each of the next three years. On August 3, 2010, in Docket No. E-48, Sub 6, the Commission held a hearing to consider NCEMPA's 2008 REPS compliance report. Proposed orders and briefs are due to be filed in October.

NCMPA1, in its plan, 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). In order to meet its 2010 REPS solar set-aside requirement, NCMPA1 intends to identify development opportunities for solar facilities to be located within its members' service areas or at municipal customer locations; evaluate potential solar applications resulting from energy audits of its members' facilities and those of their customers; consider incentives for customers to install or convert to solar thermal water heating facilities; continue refinement of existing renewable energy and REC standard offer program; continue to receive energy and RECs from its power purchase agreement with a solar facility in Shelby, North Carolina; and investigate various other regional supply-side options. NCMPA1 is participating jointly with other electric power suppliers to meet the aggregate swine waste set-

aside requirement beginning in 2012, and has entered into an agreement to purchase a combination of biomass and poultry litter RECs. On July 27, 2010, in Docket No. E-43, Sub 6, the Commission held a hearing to consider NCMPA1's 2008 REPS compliance report. Proposed orders and briefs were filed in September.

The Commission granted the towns of Winterville and Oak City, Fayetteville Public Works Commission, and TVA (on behalf of Murphy Electric Board) extensions of time until October 15, 2010, with which to file their 2010 REPS compliance plans and 2009 REPS compliance reports.

As noted above, 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 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.

# CONCLUSIONS

---

As stated in the 2009 Report and as highlighted again in this report, numerous issues have arisen 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

---

1. Docket No. E-100, Sub 113, In the Matter of Rulemaking Proceeding to Implement Session Law 2007-397
  - Order on Motion for Clarification (January 20, 2010)
  - Order on Withdrawal of Joint Motion, Issuance of Joint Request for Proposals, and Allocation of Aggregate Swine Waste Set-Aside Requirement (February 12, 2010)
  - Order on Pro Rata Allocation of Aggregate Swine and Poultry Waste Set-Aside Requirements and Motion for Clarification (March 31, 2010)
  - Order on Joint Motion to Approve Collaborative Activity Regarding Poultry Waste Set-Aside Requirement (June 25, 2010)
  - Order Requesting Comments on Modifications to Rules R8-64 Through R8-69 and Interim Operating Procedures (August 3, 2010)
  - Order Requesting Comments on Measurement and Verification of Reduced Energy Consumption (August 24, 2010)
  - Order Requesting Comments on Use of Thermal RECs to Satisfy Poultry Waste Set-Aside Requirement (August 25, 2010)
  - Order Convening Working Group on Unmetered Solar Thermal RECs (August 25, 2010)
  - Letter from Chairman Edward S. Finley, Jr., North Carolina Utilities Commission, to Secretary Dee Freeman, North Carolina Department of Environment and Natural Resources (August 31, 2010)
  - 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 (September 3, 2010)

## **2. Miscellaneous Dockets**

- Order Accepting Registration of New Renewable Energy Facility, Docket No. SP-297, Sub 0 (June 19, 2008)
- Order on Request for Declaratory Ruling, Docket No. SP-100, Sub 23 (March 25, 2009)
- Order Accepting Registration of New Renewable Energy Facility, Docket No. SP-410, Sub 0 (June 15, 2009)
- Order Issuing Amended Certificates, Accepting Registration Statement, and Issuing Declaratory Ruling, Docket No. SP-165, Sub 3 (December 17, 2009)
- Order Accepting Registration of New Renewable Energy Facility, Docket No. SP-578, Sub 0 (January 20, 2010)
- Order on Request for Declaratory Ruling, Docket No. SP-100, Sub 25 (February 24, 2010)
- Order Consolidating Dockets, Scheduling Evidentiary Hearing and Oral Argument, and Establishing Discovery Guidelines , Docket No. E-7, Subs 939 and 940 (April 27, 2010)
- Order Accepting Registration of New Renewable Energy Facility, Docket No. RET-10, Sub 0 (July 21, 2010)
- Order Approving REPS and REPS EMF Riders, Docket No. E-7, Sub 936 (August 13, 2010)

## **3. Renewable Energy Facility Registrations**

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 MOTION FOR
Session Law 2007-397	)	CLARIFICATION

BY THE COMMISSION: On January 8, 2010, Green Energy Solutions NC, Inc. (GES), filed a motion for clarification in the above-referenced docket. The motion states that the company's process for producing methane gas, which is subsequently used for electricity generation, involves the anaerobic digestion of swine or poultry waste as well as "other biodegradable material." GES requests clarification as to whether all of the electrical output produced by the resulting methane is eligible to count toward the REPS swine or poultry waste set-aside obligations established for electric power suppliers by Session Law 2007-397.

GES cites the Commission's May 7, 2009 Order on Duke Energy Carolinas, LLC (Duke), Motion for Clarification, in which the Commission stated that:

for any facility that uses swine or poultry waste to produce energy, the facility shall earn RECs that may be credited toward meeting the set-aside requirements based only upon the energy derived from the swine or poultry waste in proportion to the relative energy content of the swine or poultry waste and the other fuels used. To the extent that a portion of the other fuels used are also renewable energy resources, the facility may earn RECs associated with the other renewable fuel sources.

GES argues that the Commission's approach is not readily applicable to GES's anaerobic digestion process, wherein swine or poultry waste is mixed with other organic, biodegradable materials and together digested to produce methane. GES asserts that, since the resulting methane is the only product combusted to produce electricity, there is no other "fuel" mixed with the swine or poultry waste, as envisioned in the Commission's May 7, 2009 Order. Green Energy argues that all the methane produced by the anaerobic digestion process should collectively count toward the respective poultry waste or swine waste carve-out and, thus, 100% of the generator's electric output should qualify.

GES also states that, "while it is possible to process swine, poultry waste, or the co-substrates individually through the anaerobic digestion process the net output of biogas will be significantly less than from a combined mixture of the same mass input."

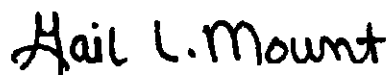
The Commission is not persuaded that all of the methane gas produced in the manner GES describes should qualify toward the REPS poultry or swine waste set-asides. The "other organic, biodegradable material" that GES mixes with the poultry or swine waste is responsible for some percentage of the resulting methane gas. All of the methane gas is not produced from the digestion of the poultry or swine waste, and, therefore, all of the generated electricity (and associated renewable energy certificates, or RECs) cannot count toward the poultry or swine waste set-asides. Consistent with its decision in the May 7, 2009 Order, 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 set-aside requirements. Where other biomass materials contribute to some portion of methane gas production, that portion of RECs shall not count toward meeting the poultry or swine waste set-asides.

IT IS, THEREFORE, SO ORDERED.

ISSUED BY ORDER OF THE COMMISSION.

This the 20<sup>th</sup> day of January, 2010.

NORTH CAROLINA UTILITIES COMMISSION

A handwritten signature in black ink that reads "Gail L. Mount". The signature is written in a cursive, flowing style.

Gail L. Mount, Deputy Clerk

kh012010.01

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 Session Law 2007-397	) ORDER ON WITHDRAWAL OF ) JOINT MOTION, ISSUANCE ) OF JOINT REQUEST FOR ) PROPOSALS, AND ALLOCATION ) OF AGGREGATE SET-ASIDE ) REQUIREMENTS
--	---

BY THE COMMISSION: On August 14, 2009, 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 (NCMPA) (jointly, the Electric Suppliers) filed a Joint Motion requesting that the Commission modify the swine and poultry waste resource set-aside requirements of the North Carolina Renewable Energy and Energy Efficiency Portfolio Standard (REPS), G.S. 62-133.8(e) and (f), and clarify the obligations thereunder. Specifically, the six Electric Suppliers requested that the Commission (1) delay the poultry waste set-aside requirement by one year and reduce the requirement by two-thirds; (2) delay the swine waste set-aside requirement by one year; and (3) declare that it is not in the public interest for an electric power supplier to buy electricity from a renewable generating facility unless the contract terms include fixed prices or other price risk mitigation provisions. Four of the Electric Suppliers – Dominion, Duke, NCEMC and PEC – also requested that the Commission modify the poultry waste set-aside requirement to require an electric power supplier to meet only a pro rata share of the total obligation.

On August 31, 2009, the Commission issued an Order requesting that the Public Staff and other interested parties file responses to the Electric Suppliers' Joint Motion.

On September 2, 2009, the Citizens for a Safe Environment; the Citizens Alliance for a Clean, Healthy Economy; the Sampson County Citizens for a Safe Environment; and the Blue Ridge Environmental Defense League, Inc. (the Community Groups), filed a petition to intervene, which petition was allowed by Order dated September 18, 2009. On September 18, 2009, the North Carolina Poultry Federation, Inc. (Federation), filed a petition to intervene, which intervention was allowed by Order dated September 25, 2009.

Comments were filed by the Community Groups; the Federation; Montgomery, Sampson and Surry Counties; Environmental Defense Fund, Southern Alliance for



Clean Energy, and Southern Environmental Law Center (Environmental Intervenors); Fibrowatt LLC (Fibrowatt); North Carolina Farm Bureau Federation, Inc. (NCFB); North Carolina Pork Council (NCPC); North Carolina Sustainable Energy Association (NCSEA); Orbit Renewable Energy Systems (Orbit); and the Public Staff.

On October 6, 2009, the Commission issued an Order scheduling an expedited evidentiary hearing for December 8, 2009, to consider the issues raised in the Joint Motion and establishing deadlines for the filing of testimony and proposed orders and briefs. The Order was mailed to all electric power suppliers in North Carolina.

On October 13, 2009, the Public Works Commission of Fayetteville filed a petition to intervene, which petition was granted October 16, 2009. On November 9, 2009, Sampson County filed a petition to intervene, which petition was granted on November 13, 2009. Petitions to intervene were filed on November 18, 2009, by Surry County, on November 20, 2009, by Montgomery County, and on November 23, 2009, by Green Energy Solutions NV, Inc. (GES), all three of which were granted by Order dated December 1, 2009.

The direct testimony of J. Michael Surface was filed on behalf of Dominion; Owen A. Smith on behalf of Duke; Carl Strickler on behalf of Fibrowatt; Julian Cothran on behalf of GES; David Beam on behalf of NCEMC; Matthew E. Schull of behalf of NCMPA; Walter Pelletier on behalf of the Federation; David Kent Fonvielle on behalf of PEC; Deborah M. Johnson on behalf of the NCPC; Judy Stevens on behalf of Montgomery County; Jackie Morris on behalf of Montgomery County; and David Mickey on behalf of the Blue Ridge Environmental Defense League and the Community Groups. Rebuttal testimony was filed by R. Craig Hunter on behalf of Surry County.

On December 4, 2009, a Joint Motion was filed by the Electric Suppliers, Fibrowatt, and GES requesting that the Commission reschedule the filing of rebuttal testimony and the evidentiary hearing in this matter. On that same day, the Commission issued an Order continuing the evidentiary hearing pending further order of the Commission and extending the deadline for rebuttal testimony up to and including December 18, 2009.

On December 16, 2009, the Electric Suppliers filed to withdraw the Joint Motion with regard to their requests that the Commission: (1) delay the poultry waste set-aside requirement of GS 62-133.8(f); (2) reduce the poultry waste set-aside requirement; and (3) declare that it is not in the public interest for the Electric Suppliers to purchase electricity from a renewable generation facility unless the proposed prices are fixed or contain reasonable price risk mitigation. The Electric Suppliers further requested that the Commission delay ruling on the pro rata allocation issue until they had submitted a settlement agreement for Commission approval.

On January 20, 2010, NCPC filed a petition to intervene, which petition was granted February 4, 2010.

On January 22, 2010, PEC filed a letter on behalf of the Electric Suppliers stating that they had met with swine waste generation parties and agreed that they would submit for Commission approval (1) an agreement for the pro rata allocation of the aggregate statewide swine waste resource set-aside obligation among the State's electric power suppliers and (2) a generic request for proposals (RFP) from swine waste generators. The letter stated that the RFP would contain a date by which all bids would be submitted and that the Electric Suppliers and swine waste generation parties, after reviewing the bids, would determine the number of megawatt-hours and/or renewable energy certificates (RECs) that can realistically be produced by 2012. If the number of megawatt-hours and/or RECs is less than the 2012 requirement, the parties will jointly petition the Commission to reduce the 2012 requirement in GS 62-133.8(e) to a level that can realistically be achieved.

On January 29, 2010, PEC filed the joint swine waste resource RFP on behalf of itself, Dominion, Duke, NCEMPA, NCMPPA, and GreenCo Solutions, Inc. (GreenCo), for approval by the Commission. PEC stated that approval of the RFP is supported by Dominion, Duke, GreenCo, NCEMPA, NCMPPA, PEC, Fibrowatt, GES, NCPC, NCSEA, the Attorney General and the Public Staff. NCEMC has also indicated its support of the RFP. In support of approval of the RFP, the parties stated:

A jointly issued RFP for swine waste generated electricity will assist all parties in coordinating swine waste proposals and in determining the amount of swine waste generation that can realistically be expected to be available in 2012 to meet the set-aside requirement. The parties need to issue the RFP on February 15, 2010 in order to process the bids, execute contracts and have plants under construction by the end of 2010. Thus, we ask for expedited approval of the RFP.

On February 5, 2010, PEC filed a proposed mechanism to allocate between and among the State's electric power suppliers the statewide aggregate poultry waste and swine waste set-aside requirements established by G.S. 62-133.8(e) and (f). PEC stated that the mechanism was supported by Dominion, Duke, PEC, GreenCo, NCEMC, NCSEA, NCPC, Fibrowatt, GES, the Attorney General and the Public Staff. PEC stated that Carolina Industrial Group for Fair Utility Rates I, II, and III (CIGFUR) did not have sufficient time to take a position prior to the filing of the proposed mechanism. PEC stated that ElectriCities of North Carolina, Inc. (ElectriCities), does not support the proposed mechanism as written.

## DISCUSSION AND CONCLUSIONS

In its May 7, 2009 Order on Motion for Clarification, the Commission addressed several issues regarding the statewide aggregate set-aside requirements for swine and poultry waste resources. With regard to the determination of each electric power supplier's obligation, the Commission stated that "the electric power suppliers are charged with collectively meeting the aggregate requirement" and agreed with the Public Staff's comments "that the language of the swine and poultry waste set-aside

provisions contemplate that the electric power suppliers may agree among themselves how to collectively satisfy the requirements of those subsections.” In response to Duke’s further request that the Commission “clarify that joint procurement or other collaborative efforts among electric power suppliers to obtain resources to meet the state-wide poultry waste and swine waste carve-out requirements is clearly articulated and affirmatively expressed as a State policy, and that the Commission believes that its oversight of REPS compliance constitutes active supervision by the State of this policy” pursuant to Parker v. Brown, 371 U.S. 341 (1943), the Commission stated:

The Commission concludes that the REPS statute and the Commission’s rules implementing Senate Bill 3 constitute active supervision of the electric power suppliers’ activities. Under the procedures established by statute and by rule, the electric power suppliers are required to file annual REPS compliance plans and reports with the Commission, the Commission is required to review and approve the annual REPS compliance reports, and the Commission is required to annually report to the legislature and the Governor on the efforts undertaken by the electric power suppliers to comply with the REPS requirement. To alleviate any remaining concerns whether such collaborative efforts would be lawful under the “state action” doctrine, the Commission shall require that the electric power suppliers specifically file for approval any joint procurement agreements entered into or other collaborative efforts undertaken to obtain renewable energy or RECs to satisfy the aggregate swine or poultry waste set-aside requirements.

The Commission is encouraged by the progress evidently achieved by the parties with regard to the poultry waste resource set-aside requirement and finds good cause to allow the Electric Suppliers to withdraw their requests in the Joint Motion that the Commission: (1) delay the poultry waste set-aside requirement of GS 62-133.8(f); (2) reduce the poultry waste set-aside requirement; and (3) declare that it is not in the public interest for the Electric Suppliers to purchase electricity from a renewable generation facility unless the proposed prices are fixed or contain reasonable price risk mitigation. The Commission continues to urge all electric power suppliers to work together to collectively meet the statewide aggregate poultry waste resource set-aside obligation and comply with G.S. 62-133.8(f).

The Commission further concludes that issuance of the joint RFP is reasonable as a means for the electric power suppliers to work together collectively to meet the swine waste resource set-aside requirement and approves its issuance for purposes of the state action immunity doctrine. The Commission reserves the right, however, to resolve any issues or differences that may arise among bidders or potential bidders and the electric power suppliers with regard to the RFP. In addition, the Commission states that approval of issuance of the RFP does not constitute approval of the final costs associated therewith for ratemaking purposes, and this order is without prejudice of any party to take issue with the ratemaking treatment of the final costs in a future

proceeding. The Commission notes that, pursuant to G.S. 62-133.8(a)(6), RECs purchased for REPS compliance are not required to include all environmental attributes.

Lastly, the Commission notes that the proposed pro rata allocation of the aggregate swine and poultry waste resource set-aside obligations has wide, but not unanimous support among the electric power suppliers. As stated before, the Commission encourages the electric power suppliers to agree among themselves how to collectively satisfy the aggregate requirements of those subsections. Nevertheless, as evidenced by the parties' filings in this docket, the aggregate requirement has continued to be a barrier to significant progress toward meeting the swine and poultry waste resource set-aside requirements. In support of approval of the proposed pro rata allocation mechanism, the moving parties state that such approval "will provide clarity and certainty" regarding each electric power supplier's obligation to purchase swine and poultry waste generation. Although the Commission is inclined to agree with the movants that the proposed pro rata allocation is reasonable and should be approved, it will allow ElectriCities, NCEMPA, NCMPA and any other interested party to file comments on or before February 26, 2010 on this issue.

IT IS, THEREFORE, SO ORDERED.

ISSUED BY ORDER OF THE COMMISSION.

This the 12<sup>th</sup> day of February, 2010.

NORTH CAROLINA UTILITIES COMMISSION

*Gail L. Mount*

Gail L. Mount, Deputy Clerk

Kc021210.01

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 Session Law 2007-397	) ORDER ON PRO RATA ) ALLOCATION OF AGGREGATE ) SWINE AND POULTRY WASTE ) SET-ASIDE REQUIREMENTS AND ) MOTION FOR CLARIFICATION
--	---

BY THE COMMISSION: On August 14, 2009, 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 (NCMPA) (jointly, the Electric Suppliers) filed a Joint Motion requesting that the Commission modify the swine and poultry waste resource set-aside requirements of the North Carolina Renewable Energy and Energy Efficiency Portfolio Standard (REPS), G.S. 62-133.8(e) and (f), and clarify the obligations thereunder. Specifically, the six Electric Suppliers requested that the Commission (1) delay the poultry waste set-aside requirement by one year and reduce the requirement by two-thirds; (2) delay the swine waste set-aside requirement by one year; and (3) declare that it is not in the public interest for an electric power supplier to buy electricity from a renewable generating facility unless the contract terms include fixed prices or other price risk mitigation provisions. Four of the Electric Suppliers – Dominion, Duke, NCEMC and PEC – also requested that the Commission modify the poultry waste set-aside requirement to require an electric power supplier to meet only a pro rata share of the total obligation.

On December 16, 2009, the Electric Suppliers filed to withdraw the Joint Motion with regard to their requests that the Commission: (1) delay the poultry waste set-aside requirement of GS 62-133.8(f); (2) reduce the poultry waste set-aside requirement; and (3) declare that it is not in the public interest for the Electric Suppliers to purchase electricity from a renewable generation facility unless the proposed prices are fixed or contain reasonable price risk mitigation. The Electric Suppliers further requested that the Commission delay ruling on the pro rata allocation issue until they had submitted a settlement agreement for Commission approval.

On January 22, 2010, PEC filed a letter on behalf of the Electric Suppliers stating that they had met with swine waste generation parties and agreed that they would submit for Commission approval (1) an agreement for the pro rata allocation of the aggregate statewide swine waste resource set-aside obligation among the State's electric power suppliers and (2) a generic request for proposals (RFP) from swine waste

generators. The letter stated that the RFP would contain a date by which all bids would be submitted and that the Electric Suppliers and swine waste generation parties, after reviewing the bids, would determine the number of megawatt-hours and/or renewable energy certificates (RECs) that can realistically be produced by 2012. If the number of megawatt-hours and/or RECs is less than the 2012 requirement, the parties will jointly petition the Commission to reduce the 2012 requirement in GS 62-133.8(e) to a level that can realistically be achieved.

On January 29, 2010, PEC filed the joint swine waste resource RFP on behalf of itself, Dominion, Duke, NCEMPA, NCMPPA, and GreenCo Solutions, Inc. (GreenCo), for approval by the Commission.

On February 5, 2010, PEC filed a proposed mechanism to allocate between and among the State's electric power suppliers the statewide aggregate poultry waste and swine waste set-aside requirements established by G.S. 62-133.8(e) and (f) (Proposed Pro Rata Mechanism). In summary, the Proposed Pro Rata Mechanism provides (1) that the statewide aggregate swine and poultry waste set-aside requirements shall 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 total retail sales; (2) that 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) that 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) that, upon approval of the Commission, the 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.

PEC stated that the Proposed Pro Rata Mechanism was supported by Dominion, Duke, PEC, GreenCo, NCEMC, NCSEA, North Carolina Pork Council (NCPC), Fibrowatt LLC (Fibrowatt), Green Energy Solutions NV, Inc. (GES), the Attorney General and the Public Staff. PEC stated that Carolina Industrial Group for Fair Utility Rates I, II, and III (CIGFUR) did not have sufficient time to take a position prior to the filing of the Proposed Pro Rata Mechanism. PEC stated that ElectricCities of North Carolina, Inc. (ElectricCities), does not support the Proposed Pro Rata Mechanism as written.

On February 12, 2010, the Commission issued an Order allowing the Electric Suppliers to withdraw their requests in the Joint Motion that the Commission: (1) delay the poultry waste set-aside requirement of GS 62-133.8(f); (2) reduce the poultry waste set-aside requirement; and (3) declare that it is not in the public interest for the Electric Suppliers to purchase electricity from a renewable generation facility unless the proposed prices are fixed or contain reasonable price risk mitigation. The Commission further concluded that issuance of the joint RFP is reasonable as a means for the electric power suppliers to work together collectively to meet the swine waste resource set-aside requirement and approved its issuance for purposes of the state action immunity doctrine. Lastly, the Commission noted that the proposed pro rata allocation of

the aggregate swine and poultry waste resource set-aside obligations has wide, but not unanimous support among the electric power suppliers, and allowed parties to file comments on this issue.

Comments were filed on February 26, 2010, by NCEMPA, NCMPA, the North Carolina Sustainable Energy Association (NCSEA), and the Public Works Commission of Fayetteville (FPWC). On March 5, 2010, NCSEA filed a Motion for Leave to File Supplemental Comments and Supplemental Comments.

### COMMENTS BY THE PARTIES

In their joint comments, NCEMPA and NCMPA (jointly, the Power Agencies) state that they do not disagree that the Proposed Pro Rata Mechanism provides clarity not otherwise provided by the REPS legislation. However, the Power Agencies object to any amendment or rewriting of the swine and poultry waste set-aside requirements by the Commission. The Power Agencies note that, had the legislature intended for the swine and poultry waste set-aside requirements to apply individually to each electric power supplier, it could have omitted the phrase "in the aggregate" from these provisions as it did with the solar set-aside requirement. Moreover, argue the Power Agencies, G.S. 62-133.8(i)(2) cannot be read to authorize the Commission to rewrite or amend these provisions; such action is beyond the statutory authority granted to the Commission because it is an unconstitutional delegation of power by the legislature.

Notwithstanding these objections, the Power Agencies state that they will join in, and waive any objections to, the Proposed Pro Rata Mechanism if the Commission clarifies its holding in the May 7, 2009 Order on Duke Energy Carolinas, LLC, Motion for Clarification. In that Order, the Commission determined that the set-aside requirements 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) (Priority Holding). The Power Agencies seek clarification, as stated at page 3 of their filing, that this holding

only applies when an electric power supplier is meeting its REPS obligations by complying with the general REPS percentage obligation, and that satisfaction of its general REPS percentage obligation is subject to the electric power supplier's satisfaction of the set-asides.

The Power Agencies further state:

The Power Agencies, however, cannot join in the Proposed Pro Rata Mechanism if the Priority Holding is clarified to mean that an electric power supplier planning on satisfying its REPS obligations by meeting its cost cap must spend all of its cost cap dollars on the set-asides until the set-asides are satisfied before spending any of its cost cap dollars on those compliance methods listed under G.S. §§ 62-133.8(b)(2) and (c)(2), as applicable.

In their motion for clarification, the Power Agencies note that statutes should be construed in pari materia to harmonize and give effect to all provisions. State ex rel Hunt v. North Carolina Reinsurance Facility, 302 N.C. 274, 288, 275 S.E.2d 399, 405 (1981). In applying this rule of statutory construction, the Power Agencies argue, at page 12, as follows:

Of course, as stated above by the North Carolina Supreme Court, in applying such a statutory construction mechanism, statutes in pari materia must be construed and harmonized to give effect to each. The application of the construction mechanism in this context leaves intact the clear intention of the REPS Legislation that the electric power suppliers have two separate means of complying with its REPS obligations: i) by meeting the general REPS percentage requirement (except that now in order to do so, the electric power supplier must fulfill its set-aside obligations first); or ii) by reaching the per-account cost cap. If the foregoing is the sole meaning of the Priority Holding, the Power Agencies agree that the Proposed Pro Rata Mechanism is necessary to quantify the obligations of the electric power suppliers under the swine and poultry waste set-asides, which quantification is necessary to read and interpret the general requirements of G.S. [62-]133.8(c)(2) and the specific set-aside obligations set forth in G.S. [62-]133.8(e) and (f) in harmony.

The Power Agencies, however, are concerned that the Priority Holding in the Duke Order is susceptible to another interpretation, one that, if followed, would violate the above-discussed principles of statutory construction, by preventing all sections of the REPs Legislation from being read in harmony, and vitiating other compliance provisions in the REPS Legislation. It is this potential interpretation of the Priority Holding, when coupled with the Pro Rata Mechanism, that prevents the Power Agencies from joining in the Proposed Pro Rata Mechanism.

The Power Agencies further state, at pages 12 through 14, that they are concerned that the Priority Holding is susceptible to an overly broad interpretation (although such interpretation is not specifically stated in the Duke Order)

that would require an electric power supplier, whose compliance plan indicates that compliance will result from reaching its cost cap (as opposed to meeting the percentage renewable energy generation requirements set forth in the statute, including the set-asides), to spend all of its cost cap dollars first on the solar, swine and poultry waste set-asides. Such a result would be contrary to a fundamental element of the principle of statutory construction discussed above that the statutes being construed must be in pari materia or deal with the same subject matter. ... The Priority Order cannot be interpreted as applying to the cost cap because the statutory provisions that establish it need not be reconciled with, or read or interpreted in the context of, meeting the percentage requirements, including the set-asides. The statutory provisions dealing



with the percentage requirements and the statutory provisions establishing the cost cap are not in pari materia (and already can be read in harmony) because they relate to separate and distinct subject matters; it is not necessary to apply the Priority Holding to both, as no statutory construction is necessary. In addition, reading the Priority Order to apply to the cost cap would impose a condition on the cost cap that simply is not present in the statute and one that does not have to be implied to give the cost cap meaning.

The Power Agencies' fundamental concern is noted in their motion for clarification, at pages 14 through 15, as follows:

Reading the Priority Holding in a manner that applies it to the cost cap also would vitiate certain compliance methods available to electric power suppliers by the REPS Legislation. G.S 62-133.8(c)(2) sets forth various ways in which a municipality or electric membership cooperative can meet the requirements of the REPs Legislation, including, but not limited to, reducing energy consumption by the use of demand-side management or energy efficiency measures. The current projections of one of the Power Agencies indicate that, through at least 2015, it will reach its cost cap by implementing compliance activities specifically permitted by G.S § 62-133.8(c)(2), none of which would include the set-asides. If the Priority Holding were interpreted to require that the cost cap be met first with dollars spent on the set-asides, municipalities and electric membership cooperatives would be prevented from utilizing the compliance methods set forth in G.S § 62-133.8(c)(2). Such a construction would not only vitiate those compliance methods by ignoring their presence in the statute, but also prevent all provisions of the statute from being construed and harmonized to give effect to each.

In addition, such a reading of the Priority Holding makes absolutely no practical sense, and clearly is not a proper application of the statutory construction mechanism allowing specific statutes to act as exceptions to general statutes concerning similar situations. After the Commission determined, in the Priority Holding, that the set-asides were a prerequisite to fulfilling the general REPS percentage requirement, there was no ambiguity in the REPS Legislation created by any apparent conflict between the general REPS percentage requirement, the set-asides, or the cost cap. The plain language of the REPS Legislation had, at that point, been read by the Commission to establish a compliance scheme in which an electric power supplier's satisfaction of the general REPS percentage requirement and the set-aside requirements were one method of compliance, and an electric power supplier's meeting the cost cap was another method of compliance. The provisions were in harmony and made sense when read together.

At that point, any use of the statutory construction mechanism was flawed because all three sets of provisions stood on their own and had meaning in the REPS Legislation without ambiguity. In sum, the Commission had no cause to use a statutory construction mechanism in such instance, and certainly could not use a statutory construction mechanism as a basis to place new conditions on one statute – the cost cap – that, in effect, render meaningless another set of statutory provisions – the general REPS requirements in G.S. §§ 62-133.8(b)(2) and (c)(2).

In its comments, FPWC does not take a position on the pro rata proposal, but requests that the Commission affirm the following principles in any order it issues regarding either the pro rata proposal or any other swine and poultry waste allocation methodology presented in this proceeding:

- (i) the allocation methodology for aggregate swine and poultry waste resource set-aside obligations that is approved or adopted by the Commission will not require an electric power supplier to exceed the annual cost caps set forth in N.C.G.S. §§ 62-133.8(h)(3) and (4); and
- (ii) the allocation methodology for aggregate swine and poultry waste resource set-aside obligations that is approved or adopted by the Commission will not grant the aggregate swine and poultry waste resource set-aside obligations a higher priority than the solar set-aside obligation set forth in N.C.G.S. § 62-133.8(d).

FPWC states that the parties supporting the pro rata proposal support these principles.

In its comments, NCSEA supports the proposed pro rata allocation, noting that it equitably allocates the burden of advancing the public benefit embodied in the set-aside requirements among the electric power suppliers. In its supplemental comments, at pages 2 through 3, NCSEA disagrees with the Power Agencies' interpretation of the REPS statute, stating:

In its comments, the Power Agencies argue that one method for achieving compliance with the REPS law is to intentionally exceed the cost cap in G.S. § 62-133.8(h)(4). According to the Power Agencies, an electric power supplier may have a "compliance plan" that sets out to reach "its cost cap (as opposed to meeting the percentage renewable energy generation requirements set forth in the statute, including the set asides)." ... Clearly this interpretation of the law cannot be correct. While an electric power supplier may be deemed to be in compliance by reaching a cost cap, G.S. § 62-133.8(h)(3), it cannot set "exceeding the cost cap" as its REPS objective. Exceeding the cost cap without meeting the REPS requirements has to be viewed as a practical failure. A plan contemplating that result is inconsistent with the law and potentially will lead to reckless spending.

The REPS Law makes clear what constitutes compliance and how compliance can be achieved. ... While Section 62-133.8(h)(3) provides that an electric power supplier will be "deemed" in compliance with the REPS law if total incremental costs for a year exceed the respective cost cap, exceeding the cost cap without achieving the REPS requirements is nevertheless a failure to achieve compliance. The objective of the REPS Law is to achieve the REPS requirements in Sections 62-133.8(b) & (c). The goal is not to simply spend a certain amount of money on renewable energy or energy efficiency measures. Rather, the goal is to spend money in a way that will result in the REPS requirements being met. Compliance is meeting the requirements and a plan that focuses on how to exceed the cost cap, is no compliance plan at all.

## DISCUSSION AND CONCLUSIONS

The Commission agrees with the Power Agencies that the General Assembly established an aggregate obligation for the swine and poultry waste set-aside requirements, different from the solar set-aside requirement. As the Commission stated in its May 7, 2009 Order, at page 7,

by establishing an aggregate requirement for the swine and poultry waste resources, the General Assembly did not impose a specific requirement, pro rata or otherwise, on any individual electric power supplier. Rather, the electric power suppliers are charged with collectively meeting the aggregate requirement. ... The Commission, therefore, agrees with the Public Staff that the language of the swine and poultry waste set-aside provisions contemplate that the electric power suppliers may agree among themselves how to collectively satisfy the requirements of those subsections.

Such an arrangement, however, prior to February 5, 2010, has proven to be unworkable as no agreement had been reached among the electric power suppliers to allow these set-aside requirements to be met. The February 5, 2010 pro rata mechanism is one selected by most of the State's electric power suppliers and, therefore, represents their collective determination of how to meet the aggregate requirements. By approving this electric power supplier selected mechanism, the Commission agrees with this method of meeting the aggregate requirements. While the Commission would have preferred unanimous agreement among all electric power suppliers, Commission authorization over the objections of the Power Agencies does not constitute alteration of the legislatively enunciated aggregate requirements. The Commission, therefore, concludes that the Proposed Pro Rata Mechanism is a reasonable and appropriate means for the electric power suppliers to meet the aggregate swine and poultry waste set-aside obligations of G.S. 62-133.8(e) and (f).

In approving the proposed mechanism, the Commission is not amending the statute pursuant to G.S. 62-133.8(i)(2), but approving an electric power supplier selected means of determining compliance with the statute. Therefore, the Power Agencies'

argument that the authority granted to the Commission by the legislature in G.S. 62-133.8(i)(2) is unconstitutional is moot. In any event, as the Commission stated in its May 7, 2009 Order, at page 8:

First, an act of the General Assembly is presumed to be constitutional. State ex rel. Martin v. Preston, 325 N.C. 438, 448, 382 S.E.2d 473, 478 (1989). Second, it is not within the Commission's jurisdiction, as a quasi-judicial administrative agency, to rule on the constitutionality of a statute. Great Am. Ins. Co. v. Gold, 254 N.C. 168, 173, 118 S.E.2d 792 (1961).

With regard to the motion for clarification, the Commission cannot agree with the Power Agencies' interpretation of Senate Bill 3 and the Priority Holding in the May 7, 2009 Order. The Power Agencies request that the set-aside requirements only have priority over other means of complying with the general REPS requirement of Senate Bill 3 when the electric power supplier is meeting the general REPS percentage requirement, and not when the electric power supplier is limited by the per-account cost cap. However, if the electric power supplier were able to meet the general REPS percentage requirement, the question of priority would not be at issue. It is, in fact, only when the electric power supplier cannot meet the general REPS percentage requirement because of the per-account cost cap that the choice of the means of compliance becomes important. As the Commission stated in its May 7, 2009 Order, at page 5:

As a part of compliance with the general REPS percentage requirement, the General Assembly set out three specific renewable energy resource percentage or energy requirements, the solar, swine waste, and poultry waste set-aside requirements.<sup>1</sup> After careful review, the Commission concludes that, as Fibrowatt argues, although it might result in less renewable energy generation offsetting conventional electric generation, the presence of the set-aside requirements demonstrates the General Assembly's intent that they 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). This interpretation is consistent with the rule of statutory construction that provides that specific provisions of a statute should prevail over general provisions. State ex rel. Utils. Comm'n v. Lumbee River Elec. Membership Corp., 275 N.C. 250, 260, 166 S.E.2d 663 (1969). Except for the earlier date established for solar, however, there is no basis for giving one set-aside requirement priority over another if they cannot all be met without exceeding the cost cap. [Footnote in original.]

---

<sup>1</sup> Although an electric power supplier may comply with its REPS obligation either by meeting the percentage requirements set forth in the statute or by reaching the per-account cost cap, it cannot comply by meeting the general REPS percentage requirement without satisfying each of the set-aside requirements. The electric power supplier must acquire set-aside energy resources until it meets the set-aside requirements or reaches the per-account cost cap.

The Commission disagrees with the Power Agencies that the statutory provisions in Senate Bill 3 related to the general REPS percentage requirement and those related to the cost cap related to separate and distinct subject matters. An electric power supplier's obligation under the REPS section of Senate Bill 3 is to meet the general REPS percentage requirement stated in G.S. 62-133.8(b) or (c) and to meet the specific set-aside requirements set forth in subsections (d), (e) and (f). The set-aside requirements are independent and complementary obligations under Senate Bill 3; *i.e.*, an electric power supplier cannot comply with Senate Bill 3 by meeting the general percentage requirement while ignoring the set-aside requirements. An electric power supplier's obligation is limited, however, by the per-account incremental cost cap set forth in subsection (h). As stated in that subsection, an electric power supplier may not recover from its customers an amount in excess of the per-account cost caps and shall be deemed to be in compliance with the REPS requirement if its incremental costs reach the cost cap. Thus, the cost cap does not relate to a separate and distinct subject matter, but is integral to the overall compliance requirement. As the Commission further stated in its May 7, 2009 Order, at page 8,

in the REPS provisions of Senate Bill 3, the General Assembly crafted a complex arrangement of obligations, cost-containment provisions, and safety valves. In concluding that no set-aside requirement takes priority over another, it is possible that an electric power supplier may reach the cost cap established in G.S. 62-133.8(h) before it has met each of the set-aside requirements.

This statutory construction does not, as argued by the Power Agencies, "vitiate certain compliance methods available to electric power suppliers." The Power Agencies argue that, if they are required to give priority to the set-aside requirements and, in so doing, reach the incremental cost cap, they will be denied the opportunity to use other means to comply with the general REPS percentage requirement. However, if an electric power supplier reaches the incremental cost cap, it is no longer required to meet the general REPS percentage obligation and need not avail itself of any other compliance method. Thus, the Commission is not ignoring the presence of other compliance methods or preventing all provisions of the statute from being construed and harmonized, but giving effect to the General Assembly's intent in setting forth set-aside requirements in the statute. As reiterated above, quoting from the Commission's May 7, 2009 Order, at page 5,

the presence of the set-aside requirements demonstrates the General Assembly's intent that they 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).

On the one hand, the Power Agencies acknowledge in their motion for clarification, at page 14, that:

After the Commission determined, in the Priority Holding, that the set-asides were a prerequisite to fulfilling the general REPS percentage

requirement, there was no ambiguity in the REPS Legislation created by any apparent conflict between the general REPS percentage requirement, the set-asides, or the cost cap.

However, the Power Agencies further argue that they should be allowed to give priority to reducing energy consumption through the implementation of demand-side management (DSM) or energy efficiency (EE) measures pursuant to G.S. 62-133.8(c)(2)(b) over the set-aside requirements of subsections (d) through (f). The Power Agencies argue that an electric power supplier incurs incremental costs equal to the cost cap by the implementation of DSM or EE measures, it is deemed to be in compliance with the REPS provisions of Senate Bill 3 and has no obligation under the set-aside requirements.<sup>2</sup> The Commission disagrees with this interpretation of Senate Bill 3. For municipal utilities, purchasing renewable energy, renewable energy certificates (RECs) and energy savings from the implementation of DSM or EE measures are alternative methods of compliance with the general REPS percentage requirement. Just as renewable energy derived from the sun, swine waste and poultry waste have priority over renewable energy derived from other renewable energy resources, these set-aside requirements have priority over other methods of compliance with the general REPS percentage requirement where the general requirement cannot be met without exceeding the incremental cost cap. This does not mean that an electric power supplier that expects to incur incremental costs equal to the cost cap should not implement DSM or EE measures with no incremental cost, *i.e.*, that result in energy savings at a cost below the utility's avoided cost. The Commission takes judicial notice of the EE potential evaluated in connection with the 2006 study by La Capra Associates,<sup>3</sup> the integrated resource plans submitted by the electric public utilities,<sup>4</sup> and other recent studies that indicate that substantial energy savings may be realized through the implementation of DSM or EE measures at a cost less than the average avoided costs in North Carolina.<sup>5</sup> Nevertheless, the Commission reiterates its earlier holding that the set-aside requirements, as demonstrated by their 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.

---

<sup>2</sup> The Power Agencies' argument is based on the assumption that "incremental costs" incurred by municipal electric suppliers in implementing DSM and EE measures are costs limited for recovery by the cost cap provisions of Senate Bill 3. While this issue was discussed in Issue 32 of the Commission's February 29, 2008 Order Adopting Final Rules, Docket No. E-100, Sub 113, the Commission declined at that time to adopt a definition of "incremental costs" that is more restrictive than that provided in Senate Bill 3 or to prejudge any proposals for DSM/EE cost recovery. The Commission, therefore, notes that the Power Agencies' assumption has never been expressly addressed or adopted. The Commission determines that it can resolve the disputes raised by the Power Agencies currently at issue in this docket without addressing this assumption.

<sup>3</sup> Analysis of a Renewable Portfolio Standard for the State of North Carolina, La Capra Associates, December 2006; A Study of the Feasibility of Energy Efficiency as an Eligible Resource as Part of a Renewable Portfolio Standard for the State of North Carolina, GDS Associates, Inc., December 2006.

<sup>4</sup> See, e.g., Docket No. E-100, Subs 118 and 124.

<sup>5</sup> See, e.g., North Carolina's Energy Future: Electricity, Water, and Transportation Efficiency, American Council for an Energy-Efficient Economy, March 2010.

Lastly, the Commission agrees with FPWC that approval of the Proposed Pro Rata Mechanism will not require an electric power supplier to exceed the incremental cost cap and will not grant the swine and poultry waste set-aside requirements a higher priority than the solar set-aside requirement. As the Commission stated in its May 7, 2009 Order, at page 5,

Although no set-aside requirement has priority over another, the Commission does not agree with Fibrowatt that an electric power supplier should be required to obtain some of each of the set-aside resources if it cannot satisfy all of the set-aside requirements without exceeding the cost cap. Electric power suppliers may exercise their reasonable judgment in determining which renewable energy or RECs to acquire with the funds available under the cost cap.

IT IS, THEREFORE, ORDERED that the proposed pro rata mechanism of allocating the statewide aggregate swine and poultry waste set-aside requirements among the State's electric power suppliers filed on February 5, 2010, shall be, and hereby is, approved as a means of determining compliance by any electric power supplier with the REPS provisions of Senate Bill 3.

ISSUED BY ORDER OF THE COMMISSION.

This the 31st day of March, 2010.

NORTH CAROLINA UTILITIES COMMISSION

A handwritten signature in cursive script that reads "Patricia Swenson".

Patricia Swenson, Deputy Clerk

Kc033110.01

**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 Session Law 2007-397	) ) ) )	ORDER ON JOINT MOTION TO APPROVE COLLABORATIVE ACTIVITY REGARDING POULTRY WASTE SET-ASIDE REQUIREMENT
--	------------------	--

BY THE COMMISSION: On May 24, 2010, Progress Energy Carolinas, Inc.; Dominion North Carolina Power; North Carolina Electric Membership Corporation; North Carolina Eastern Municipal Power Agency; North Carolina Municipal Power Agency Number 1; EnergyUnited Electric Membership Corporation; Halifax Electric Membership Corporation; GreenCo Solutions Inc.; and Fayetteville Public Works Commission (jointly, the Movants) filed a Joint Motion requesting Commission approval to jointly *procure and/or engage in collaborative efforts to obtain renewable energy or renewable energy certificates (RECs) to satisfy the poultry waste resource set-aside requirement of the North Carolina Renewable Energy and Energy Efficiency Portfolio Standard (REPS), G.S. 62-133.8(f).* In support of the Joint Motion, the Movants state that, since the Commission's March 31, 2010 approval of the pro rata mechanism for allocating the statewide aggregate swine and poultry waste set-aside requirements, they have determined that the most efficient, equitable and productive means for each to procure their pro rata allocated share of the poultry waste set-aside requirement is to collaborate in the evaluation of the various poultry waste generation technologies and the joint procurement of poultry waste generated renewable energy. As provided in the Commission's May 7, 2009 order in this docket, the Movants seek Commission approval to (a) share the poultry waste generation bids they have received with the other Movants; (b) enter into joint agreements with poultry waste generators to purchase renewable energy and RECs; and (c) otherwise engage in collaborative activity to comply with the poultry waste set-aside requirement. The Movants argue that such collaboration and joint procurement will provide the following benefits to the state and the Movants: (1) each of the Movants will have an equal opportunity to procure poultry waste generated renewable energy from the most cost-effective resources available; (2) each of the Movants will avoid having to conduct individual poultry waste generation solicitations; and (3) for those Movants whose individual pro rata obligations are not sufficiently large to justify and support a poultry waste generating facility, they may combine their respective poultry waste obligations to create a need of sufficient size to justify an entire poultry waste facility.

In its February 12, 2010 Order in this docket, the Commission reiterated its support for such collaborative efforts and continued to urge all electric power suppliers to work together to collectively meet the statewide aggregate poultry waste set-aside



obligation and comply with G.S. 62-133.8(f). The Commission further concluded in that order that issuance of a proposed joint RFP for energy derived from swine waste and swine waste RECs was *reasonable as a means for the electric power suppliers to work together collectively to meet the swine waste set-aside requirement* and approved its issuance for purposes of the state action immunity doctrine.

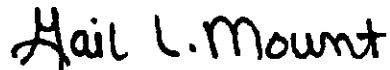
After careful consideration, the Commission similarly concludes that the collaborative efforts proposed in the Joint Motion are reasonable as a means for the Movants to work together collectively to meet the poultry waste set-aside requirement and approves such efforts for purposes of the state action immunity doctrine. The Commission reserves the right, however, to resolve any future issues or differences that may arise among potential suppliers of poultry waste derived energy or RECs and the Movants. In addition, the Commission states that its approval does not constitute approval of any costs for ratemaking purposes, and this order is without prejudice of any party to take issue with the ratemaking treatment of any costs in a future proceeding.

IT IS, THEREFORE, SO ORDERED.

ISSUED BY ORDER OF THE COMMISSION.

This the 25<sup>th</sup> day of June, 2010.

NORTH CAROLINA UTILITIES COMMISSION

A handwritten signature in black ink that reads "Gail L. Mount". The signature is written in a cursive, slightly stylized font.

Gail L. Mount, Deputy Clerk

Commissioner ToNola D. Brown-Bland did not participate in this decision.

SW062510.01

**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 REQUESTING COMMENTS
	)	ON MODIFICATIONS TO RULES R8-64
And	)	THROUGH R8-69 AND INTERIM
	)	OPERATING PROCEDURES FOR
DOCKET NO. E-100, SUB 121	)	NC-RETS
	)	
In the Matter of	)	
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 Senate Bill 3 and the State's Renewable Energy and Energy Efficiency Portfolio Standards (REPS). In response to those Orders, proposed rule changes were filed by ElectricCities of North Carolina, Inc. (ElectricCities) on January 29, 2010; Virginia Electric and Power Company d/b/a Dominion North Carolina Power (Dominion) on February 1, 2010; and by Duke Energy Carolinas, LLC (Duke); Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc. (PEC); the North Carolina Sustainable Energy Association (NCSEA); and the Public Staff on March 1, 2010. On April 1, 2010, reply comments were filed by Dominion, Duke, ElectricCities, the North Carolina Electric Membership Corporation (NCEMC), PEC, and the Public Staff.

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). 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. The following parties submitted comments in response to the Commission's January 27, 2010 Order: CPI USA North Carolina LLC

(CPI) on March 9, 2010; Electricities on February 19, 2010 and March 5, 2010; GreenCo Solutions, Inc. (GreenCo) on March 5, 2010; NCSEA on February 26, 2010 and March 5, 2010; the Public Staff on February 19, 2010; and QVC Rocky Mount, Inc. (QVC) on February 19, 2010. In addition, on February 19, 2010, Dominion, Duke, and PEC filed joint comments.

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) 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.

By this Order, the Commission (1) makes its preliminary decisions regarding the parties' proposed amendments to Rules R8-64 through R8-69; (2) proposes additional amendments to those Rules; (3) invites parties to comment on the proposed amendments and the NC-RETS Interim Operating Procedures by August 20, 2010; and (4) establishes 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. Appendix A to this Order includes the revised Rules R8-64 through R8-69 (and the application form for registering renewable energy facilities) on which the Commission has decided to seek comments by issuance of this Order.<sup>1</sup> The NC-RETS Interim Operating Procedures are attached to the Commission's July 1, 2010 Order in Docket No. E-100, Sub 121.

---

<sup>1</sup> Throughout this Order, deletions from the current wording of the rules are shown by strike through, and additions are shown by underlining.

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

### **Issue 1: Clarifying That CPCN "Applicant" Is The Owner Of The Facility And Requiring Electronic Mailing Address**

Rule R8-64(b)(1)(i) requires an "applicant" for a certificate of public convenience and necessity (CPCN) to provide their name, business address, and telephone number. The Commission will clarify the provision to specify that "applicant" in this context means the owner of the proposed facility. Further, in order to facilitate the Commission's ability to issue orders electronically, applicants will be required to provide an electronic mailing address, consistent with the Commission's March 11, 2010 Order in Docket No. M-100, Sub 134. The Commission will also amend Rule R8-64(b)(1)(ii) to require the owner's agent to provide a business telephone number and electronic mailing address. These changes are shown in Appendix A.

### **Issue 2: CPCN And Report Of Proposed Construction Filings To Include The Owner's Plan For RECs**

Rule R8-64(b)(1)(x) requires a qualifying facility (QF)<sup>2</sup> applicant for a CPCN, or, by reference, a facility that files a report of proposed construction under Rule R8-65, to provide with its application, "the applicant's general plan for sale of the electricity to be generated . . . ." The Commission would find it helpful if such submittals also included the facility owner's "general plan for the disposition of renewable energy certificates or other environmental attributes." This will assist applicants and utilities to identify facilities that also need to register as "renewable energy facilities" under Rule R8-66. The Commission will, therefore, add this filing requirement to Rule R8-64, and by reference, Rule R8-65, as shown in Appendix A.

### **Issue 3: Proposal To Require Financial Viability Information With CPCN Applications**

Rule R8-64(b)(1) specifies the information to be included in an application for a CPCN by a qualifying cogenerator or small power producer. Duke proposes to add a new filing requirement, which would necessitate renumbering the subsequent provisions, as follows:

(xi) The minimum capacity and energy rates required in order for the facility to be financially viable and the cost justification for such rates and terms. If the rates necessary to make the project viable are significantly higher than the host utility's avoided cost rates the applicant must explain how it intends to generate the additional funds necessary to sustain its operations; and

---

<sup>2</sup> Under the Public Utility Regulatory Policies Act of 1978 (PURPA), a "qualifying facility" or "QF" is either a small power producer (less than 80 megawatts) whose primary fuel is renewable, or a cogenerator (producing both electricity and useful thermal energy).

In their reply comments, Dominion and PEC support Duke's proposal. Duke argues that, under PURPA, electric public utilities must buy electricity from "qualifying facilities" at the utility's "avoided cost." "However, in many cases, QFs need to receive a rate that is in excess of the host utility's avoided cost rate to make the project commercially viable . . . ." In its comments, Duke asserts that a QF seeking a CPCN from the Commission should be required, in its CPCN application, and subject to any necessary confidentiality protections, to clearly identify the avoided cost rates needed for project viability. Duke argues that granting a CPCN without an understanding of how the facility will pay for itself "may give rise to the implication that the host Electric Public Utility will be required to pay" more than its avoided cost rates for the facility's electric output.

The Public Staff opposes Duke's proposal, stating that it would distort the process by which electric utilities and renewable energy facilities negotiate the price to be paid for renewable energy. The Public Staff asserts that the utility typically has a bargaining advantage, because it routinely deals with many renewable energy suppliers and thus has broad access to information relevant to the negotiations. The utility's advantage would be even greater if the renewable energy facility is required to specify the minimum rates required for it to be viable. In effect, the renewable energy facility would be required to disclose its "bottom line" to the utility before the negotiations began.

In the Public Staff's view, it is not in the public interest if potential renewable energy producers conclude that they cannot obtain a satisfactory price for their power in North Carolina, and locate in other states, or elect not to undertake a renewable energy project at all. Further, the Public Staff argues that Duke's proposed language would be difficult for the Commission to enforce. Renewable energy producers would be inclined to inflate the minimum price figure required by Duke's proposal, and there would be no practical way to distinguish between a minimum figure that reflects a good-faith estimate of expected costs and one that has been intentionally inflated.

The Public Staff also notes that G.S. 132-1.2 provides for a trade secret exception to the State's policy favoring disclosure of public records. In State ex rel. Utilities Commission v. MCI Telecommunications Corp., 132 N.C. App. 625, 514 S.E.2d 276 (1999), the Court of Appeals adopted a very broad interpretation of this statute. It appears to the Public Staff that if Duke's proposed paragraph (b)(1)(xi) were adopted, a renewable energy producer's minimum price estimate could properly be designated as proprietary information and filed under seal. Thus, Duke's proposed filing requirement would serve no useful purpose for utilities. NCSEA also opposes Duke's proposal, stating that the "law is clear on the rate a host utility is required to pay and information Duke seeks does not make it any clearer or more firm."

By granting a CPCN for a QF, the Commission is asserting only that the facility is needed, and that the utility is required to purchase the energy output at the utility's avoided cost. Therefore, the Commission believes existing mechanisms protect customers from subsidizing uneconomic facilities, and agrees with NCSEA that the law

is clear as to payments by a host utility. Duke apparently believes that information regarding a QF's "required" avoided cost payments during the CPCN process would clarify whether a QF project is viable. However, electricity payments are not the only revenue stream available to a QF. Depending on its fuel source, a QF could potentially earn and sell its RECs, and co-generating QFs could potentially have revenues from warm water or steam output. Furthermore, it is highly unlikely that a QF would have firm commitments regarding all of these revenue streams during the CPCN proceeding, leaving its financial viability still unclear during the CPCN proceeding. The Commission notes further that its May 13, 2009 Order Establishing Standard Rates and Contract Terms for Qualifying Facilities in Docket No. E-100, Sub 117 reinforces the Commission's long-standing process for determining the avoided-cost rates to be paid to a QF, including Commission arbitration if necessary. The Commission also agrees with the Public Staff's assertion that a renewable energy developer would likely seek to prevent disclosure of its project's financial status via the State's trade secret protections. Therefore, the Commission will reject Duke's proposed amendment to Rule R8-64(b)(1) because it appears to be unnecessary and unworkable.

#### **Issue 4: Copies Of CPCN Applications**

Rule R8-64(b)(6) requires that a CPCN applicant file 30 copies of its application with the Chief Clerk. The Commission finds that 30 copies are no longer required, and will amend Rule R8-64(b)(6) as shown in Appendix A to reduce the number of copies to 15.

#### **Amendments to Rule R8-65. Report by Persons Constructing Electric Generating Facilities Exempt From Certification Requirement**

#### **Issue 5: Copies Of Report Of Proposed Construction Submittals, Electronic Mailing Addresses**

Rule R8-65 specifies the information to be included in a "report of proposed construction." Such reports are required to be filed before construction of an electric generating facility that is not required to obtain a CPCN pursuant to G.S. 62-110.1(g), including non-utility owned facilities fueled by renewable energy resources that are under two megawatts in capacity, and electric generating facilities constructed primarily for the owner's own use. No parties suggested changes to Commission Rule R8-65. The Commission notes that the owner of a proposed solar thermal facility, which does not generate electricity, is not required to file either an application for a CPCN pursuant to Rule R8-64 or a report of proposed construction pursuant to Rule R8-65. The owner of the solar thermal facility, however, is required to file a registration pursuant to Rule R8-66 if it intends to earn RECs eligible to be used for compliance with the REPS.

The Commission notes that Rule R8-65(d) requires each applicant to file 30 copies of its application with the Chief Clerk. The Commission has found that 30 copies are no longer required, and will reduce the number of copies to 15. In addition, as Rule R8-65(e) is currently worded, the Chief Clerk is required to provide

16 copies of each report of proposed construction to the Clearinghouse Coordinator of the Office of Policy and Planning of the Department of Administration. The Commission finds that only two copies are needed by the Clearinghouse Coordinator. Therefore, the number of copies will be reduced to two. Further, in order to facilitate the Commission's ability to issue orders electronically, applicants will be required to provide an electronic mailing address consistent with the Commission's March 11, 2010 Order in Docket No. M-100, Sub 134. These changes are shown in Appendix A.

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

Rule R8-66 specifies the information to be included in an application to register a facility as a "renewable energy facility" or a "new renewable energy facility." The RECs associated with the output from such facilities are eligible to be counted toward an electric power supplier's REPS obligation. Rule R8-66 also specifies information to be provided to the Commission annually by such a facility.

#### **Issue 6: Clarify That Renewable Energy Facilities Must Be Registered With The Commission**

ElectriCities proposes a minor revision to Rule R8-66(b) to clarify the requirement that the owner of a renewable energy facility that intends to earn RECs must register "the facility," (rather than themselves) with the Commission. The Commission agrees that was the intent of the Rule and will make the revision proposed by ElectriCities and as shown in Appendix A.

#### **Issue 7: Proposal to Exempt Small Generators And Those Participating In Utility Programs From Registering With The Commission**

NCSEA proposes changes to Rule R8-66(b) that would exempt renewable energy facilities 10 kW or less, or generators participating in a utility-sponsored and Commission-approved program, from registering with the Commission. NCSEA proposed similar changes to Rules R8-67(c)(i)(viii) and R8-67(g). Unfortunately, NCSEA did not provide comments explaining the need or rationale behind its proposals, especially the 10-kW threshold, or why generators in a utility-sponsored program should be exempt from various aspects of the Commission rules. The Commission will, therefore, reject NCSEA's proposed changes at this time. However, the Commission will continue to solicit input from parties in this proceeding and from the NC-RETS Stakeholder Group<sup>3</sup> as to whether and how the Commission's rules might be changed in order to accommodate smaller generators or those participating in utility programs.

---

<sup>3</sup> See page 52 for an explanation of the NC-RETS Stakeholder Group.

### Issue 8: Registration Statements Required Of Electric Power Suppliers

Rule R8-66(b) states in part:

The registration statement may be filed separately or together with an application for a certificate of public convenience and necessity, with a report of proposed construction by a person exempt from the certification requirement, or by an electric power supplier with a compliance plan under Rule R8-67(b) if the facility is owned by the electric power supplier or under contract to the electric power supplier as of the effective date of this rule. [Emphasis added.]

Due to the passage of time and the Commission's preference to separate facility registration proceedings from REPS compliance plan/IRP proceedings, the Commission believes that the underlined language is no longer needed and will delete it, as shown in Appendix A.

### Issue 9: Renewable Energy Facilities Must Register With The Commission

NCSEA suggests amending Rule R8-66(b) as follows:

All relevant renewable energy facilities shall be registered prior to their participation in a statewide renewable energy certificate tracking system (NC-RETS). ~~the electric power supplier filing its REPS compliance report pursuant to Rule R8-67(c).~~

In light of the Commission's January 27, 2010 proposal to adopt rules regarding a North Carolina REC tracking system, the Commission believes NCSEA's proposal is helpful, but will change it slightly, as shown in Appendix A, to clarify that a renewable energy facility cannot have RECs issued for its output via NC-RETS until it has first registered with the Commission:

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).

### Issue 10: Requirements For Registering A Renewable Energy Facility With The Commission<sup>4</sup>

Duke proposes extensive revisions to subsection (b) of Rule R8-66, including a reduction in the amount of information to be provided by registrants. Duke contends that the registration process is overly burdensome and requires registrants to provide more information than is necessary. The Public Staff states that, while some information required by the Rule might not be needed, in general, the information enables the

---

<sup>4</sup> Unless stated otherwise, in this Order, "renewable energy facility" is intended to include "new renewable energy facilities."



Commission to identify and locate a facility when it becomes the subject of controversy, or when the Commission desires to send a representative to inspect its operating equipment or review its books and records. The Public Staff agrees with Duke that subdivisions (1) and (2) should specifically identify the information to be provided, rather than cross-referencing Rule R8-64 and the federal Form EIA-923. Renewable power producers find it burdensome to look up unfamiliar rules and forms and identify the data required. This is especially true of small facilities that do not file federal Form EIA-923.

The Commission notes that, in initially adopting Rule R8-66, it required for registration only a subset of the information required by an applicant for a CPCN. The Commission is concerned that some of Duke's proposed filing requirement deletions could hinder the Commission's ability to "[e]nsure 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," as required by G.S. 62-133.8(i)(5). Specifically, in reviewing registration applications, the Commission has found it helpful to have information regarding ownership of a facility's site (versus the facility itself), environmental permits, and the facility's exact location. The Commission believes the public could find this information helpful as well. It has been the Commission's experience, however, that receiving actual copies of all permits obtained by wind farms, which often are permitted one turbine at a time, is not necessary. Several such facilities have requested and received waivers of the current Rule such that, instead of providing copies of all permits, they instead provided a complete set of permits for one generator and an attestation that all of its permits are available for inspection if necessary. The Commission will modify the Rule for wind farms consistent with the waivers it has granted. That is, the Commission will require wind facilities with multiple turbines, where each turbine is licensed separately, to provide copies of such approvals for one turbine of each type installed at the facility, and attest that approvals for all of the turbines at the facility are available for inspection. In addition, rather than requiring applicants who have had a registration application(s) approved in the past to file copies of permits as they are acquired, the Commission will amend the Rule to require only that the facility owner notify the Commission when a permit has been acquired or revoked. The Commission will also eliminate the cross-references to requirements in Rule R8-64 and the federal Form EIA-923 and instead specify all of the registration filing requirements directly in Rule R8-66(b). Accordingly, the Commission will modify Rule R8-66(b)(1) and (2), as well as create a new Rule R8-66(h), as shown in Appendix A.

#### Issue 11: Renewable Energy Facilities To Provide Electronic Mailing Address

The Commission will amend Rule R8-66(b)(1)(i) to require renewable energy facility owners to include an electronic mailing address with their registration applications, consistent with the Commission's March 11, 2010 Order in Docket No. M-100, Sub 134, in order to facilitate the electronic transmission of Commission orders. The Commission will also amend Rule R8-66(b)(1)(ii) to require the

owner's agent to provide a business telephone number and electronic mailing address. These changes are shown in Appendix A.

#### Issue 12: Owners Of Renewable Energy Facilities To Include Information Regarding Metering And REC Tracking System With Registration

The Commission believes it will help ensure that a facility's RECs are properly issued if applicants provide information regarding the facility's metering and participation in a REC tracking system. Therefore, the Commission will amend Rule R8-66(b)(1) as follows to require the facility owner to provide information regarding what entity does (or will) read the facility's energy production meter(s), and whether the facility participates in a REC tracking system, and if so, which one:

- (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.

#### Issue 13: Application Form For Registering Renewable Energy Facilities

Duke proposes development of a standard registration form for registrants; the Public Staff and Dominion agree that there should be a standard registration form. The Public Staff reviewed the draft form attached to Duke's comments and believes it is reasonable in format, except that it eliminates some information that the Public Staff prefers be retained. The Commission notes that registrants from time to time have informally suggested that the Commission provide an application form. Therefore, the Commission will adopt such a form that conforms with Rule R8-66, as amended by this Order. That form is attached to this Order near the end of Appendix A.

#### Issue 14: Annual Recertification Of Renewable Energy Facilities

Current Rule R8-66(b) requires that an owner of a renewable energy facility annually update its registration with the Commission by (1) filing schedules from the federal Form EIA-923; (2) certifying that the facility remains in substantial compliance with all federal and state laws, regulations and rules for the protection of the environment and the protection of natural resources; (3) certifying that the facility continues to be operated as a renewable energy facility; (4) certifying that the owner has not sold the same RECs to more than one party; and (5) certifying that the owner continues to make its books and records available for audit by the Public Staff.

Duke and Electricities propose the elimination of the annual recertification requirement for renewable energy facilities, and in reply comments, Dominion and PEC agree. Electricities, for example, argues that "the annual submittals . . . are not

necessary considering that renewable energy certificates (RECs) sold in North Carolina will be verified and validated through their registration with the upcoming North Carolina REC Tracking System . . . and . . . the annual reporting of such information has generally been viewed by out-of-State renewable energy facilities . . . as an unwelcome and unnecessary burden.”

NCSEA proposes to add the following new subsection (f) to Rule R8-66, which would simplify the recertification requirements and make it clear that they are due annually on April 1:

(f) No later than April 1st of each year following initial registration, the owner of the renewable energy facility or an individual duly authorized to act on behalf of the owner shall certify through NC-RETS that all information provided within the registration statement remains true and accurate.

Dominion recommends that out-of-state renewable energy facilities that earn RECs to be used for REPS compliance should only be required to file registration information for the year in which its RECs were purchased by a North Carolina electric power supplier, “rather than re-filing every year regardless of whether any RECs are purchased by the utility during that year. Furthermore, the supplier of any RECs banked by the purchaser and carried over to the next year should not be required to re-file the registration in that following year unless new RECs are also purchased.”

The Public Staff believes that the annual recertification requirement should be retained for all renewable energy facilities, including those in the categories cited by Dominion, stating that the primary purpose of recertification is to remind a registrant that it must comply with all applicable laws and regulations for environmental protection; that it must generate its power from renewable sources; that it must not remarket or resell RECs that have previously been sold; and that it must consent to auditing by the Public Staff and provide access to its books and records and its operating facility to the Commission and the Public Staff. Because some renewable energy facilities are relatively small businesses, lacking the resources to consult routinely with legal counsel, the Public Staff believes that both the registrant and the Commission can benefit from this periodic reminder and acknowledgement of the registrant's legal duties.

The Commission believes that the annual recertification of renewable energy facilities assists in maintaining the integrity of North Carolina's portfolio standard. However, the Commission agrees it is possible to structure this recertification in a manner that is less burdensome. Accordingly, those facilities that participate in NC-RETS will be able to complete their annual recertifications online as suggested by NCSEA. However, because not all renewable energy facilities will be account holders in

NC-RETS, the Commission will not adopt the language proposed by NCSEA. Instead, the Commission will add the following provision to Rule R8-66(b):

(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.

The Commission notes that, under new Rule R8-66(h), a renewable energy facility that no longer wishes to participate in NC-RETS or sell RECs to an electric power supplier for REPS compliance may motion the Commission of that fact and have its registration prospectively withdrawn. (See Issue 24.) Therefore, the Commission will decline to adopt the provisions proposed by Dominion.

Issue 15: Whether Renewable Energy Facility Owners Must Provide Federal Form EIA-923

Rule R8-66(b)(2) currently provides that renewable energy facilities that are required to file Federal Form EIA-923 with the Energy Information Administration of the U.S. Department of Energy shall include portions of that form with both its initial registration as well as its annual recertification filings with the Commission. This Rule further provides that the owner of a facility that is not required to file federal Form EIA-923 must nevertheless file the information required by Schedules 1, 5, 6, and 9 of that form with its registration application and annually with the Commission.

NCSEA contends that either this requirement should be eliminated for facilities with 1 MW or less in capacity, or else the subdivision should be rewritten to specifically identify the information that is being required. The Public Staff agrees that the information to be provided by renewable energy facilities should be identified specifically, rather than by cross-reference to federal Form EIA-923 or Rule R8-64. The Public Staff also states that, if the Commission determines that all of the information currently required from federal Form EIA-923 is now available on the REC tracking system, NC-RETS, then it may be possible to delete the requirement that it also be filed annually in a written document. In its reply comments, Dominion disagrees with NCSEA, stating that all facilities "should be subject to the same rules." Dominion believes that "redundant filing requirements, including federal Form EIA-923, should be removed for all facilities." Similarly, PEC agrees that all requirements regarding federal Form EIA-923 should be deleted.

The Commission finds the information contained in Schedules 1, 5, 6 and 9 of federal Form EIA-923 to be helpful as it reviews renewable energy facility registrations and believes that the requirement to provide this information should be retained as part of the Commission's registration process. However, exact copies of the federal Form EIA-923 are not necessarily needed. In addition, once a facility has become operational and been registered with the Commission, and its RECs are being issued in a registry such as NC-RETS, it is no longer necessary for the facility to provide this data

during the annual recertification process. The energy production and fuel data required by and maintained within NC-RETS (or another registry) should suffice. Therefore, the Commission will continue to require this information from facility owners who seek to register their facilities as renewable energy facilities or new renewable energy facilities. The Commission will amend Rule R8-66(b)(1), as shown in Appendix A, to (1) specify the information required of new applicants in both the Rule and in the application form provided near the end of Appendix A to this Order; (2) eliminate the requirement that new applicants provide exact copies of the federal Form EIA-923 schedules; and (3) eliminate the requirement that the federal Form EIA-923 information be provided annually during re-certification.

**Issue 16: Facilities Selling Environmental Attributes To The Voluntary Market Cannot Also Have RECs Issued In NC-RETS**

The Commission notes that there may be some confusion as to whether an electric generator that uses renewable energy resources, but sells its RECs to NC GreenPower, can also register as a renewable energy facility, create RECs in NC-RETS, and sell them to an electric power supplier for REPS compliance. In fact, a REC associated with one megawatt-hour of generation by a renewable energy resource may only be used for a single purpose, and may not be sold to both NC GreenPower for retirement in the voluntary REC market and to any other entity, including to an electric power supplier to meet its REPS obligation. The Commission, therefore, will amend Rule R8-66(b)(5), renumbered as necessary, as follows:

~~(5)~~ (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.

**Issue 17: Requirement To Report REC Sales**

Dominion proposes to delete the final sentence of subdivision (b)(5), which provides that a renewable energy facility, as part of its annual recertification, "shall . . . report whether it sold any renewable energy certificates (whether or not bundled with electric power) during the prior year and, if so, how many and to whom." Dominion states that a merchant facility and the REC purchaser would deem this to be competitive information, and requiring the facility to disclose this information would discourage the sale of RECs. Electricities agrees with Dominion that the information "regarding sales and the identification of the purchasers is proprietary." Dominion does

not believe that this part of the Rule is necessary to ensure that the same RECs have not been sold multiple times.

The Public Staff objects to Dominion's proposal, stating that the information required by this provision of the Rule can be useful in investigating charges that a renewable energy facility has sold the same RECs to multiple purchasers. The Public Staff acknowledges that information on REC sales is available on NC-RETS, but states that NC-RETS is designed to deal exclusively with North Carolina transactions, whereas the information required in the annual recertification encompasses all of a facility's REC sales, whether inside or outside the State.

The Commission notes that all renewable energy facilities and new renewable energy facilities are required to participate in NC-RETS or another registry. NC-RETS and other registries were established to ensure that a specific REC can be owned by only one entity at a time. The registries do this by (1) requiring participating facilities to belong to only one registry, where one REC (with narrow exceptions) is issued for each megawatt-hour of qualifying energy production, and (2) managing and tracking the process of transferring RECs from one owner to another, including across registries. The Commission agrees with Dominion that a renewable energy facility, especially one located outside of North Carolina, might balk at supplying a list of all of its REC purchasers and their purchase amounts, especially because many of the purchasers could be entities not located in North Carolina or subject to this State's REPS obligation. A facility's customers might forbid it from releasing that information. In addition, the Public Staff will have the ability to audit all RECs issued in NC-RETS. For RECs imported from another registry, the Public Staff should be able to confer with the originating registry, if necessary. Each renewable energy facility that has registered with the Commission, regardless of its location, has agreed to allow the Public Staff to audit its books and records, and only RECs produced by such facilities are eligible to count toward REPS compliance. This general audit authority should be sufficient to assure the integrity of RECs used for compliance with North Carolina's REPS. The Commission's original rule was developed outside the context of a REC tracking system. With the advent of NC-RETS, the Commission believes the requirement is no longer needed and could, in fact, discourage the sale of RECs to North Carolina electric power suppliers. The Commission, therefore, will eliminate the last sentence of subdivision (b)(4) (previously numbered (b)(5)), thereby no longer requiring a renewable energy facility owner to annually report whether it sold any RECs during the prior year and, if so, how many and to whom. This change is shown in Appendix A.

#### Issue 18: On-Going Authority To Audit Renewable Energy Facilities

Dominion also proposes to delete Rule R8-66(b)(6), which provides:

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 with access to its books and records, wherever they are located, and to the facility.

Dominion argues that "REC suppliers may be unwilling to assume such a broad liability or submit to these burdensome requirements," thereby impeding the REC procurement process. Dominion believes that participation in a REC tracking system should be sufficient.

The Public Staff disagrees, stating that this subdivision should be retained. The Public Staff believes it might be essential for its staff to inspect a facility and examine its books and records in order to resolve issues such as the price paid by a utility for RECs from a particular facility, whether the facility is in fact using a renewable energy resource, or whether the facility has sold the same RECs to multiple purchasers.

Since any potential audit of the owner of a renewable energy facility would be limited to transactions with North Carolina electric power suppliers, the Commission agrees with the Public Staff. The Commission, therefore, declines to adopt Dominion's proposal to eliminate Rule R8-66(b)(6). However, the Commission will change the (6) to (5) to accommodate the required re-numbering as a result of the Commission's deletion of Rule R8-66(b)(2).

#### Issue 19: Copies Of Registration Submittals

Rule R8-66(b)(9) requires a facility owner to file 30 copies of its registration statement. The Commission finds that 15 copies are sufficient, and will revise the Rule accordingly, as shown in Appendix A.

#### Issue 20: Deadline For REC Issuance

Rule R8-66(c) states:

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) [initial registration and annual recertification requirements] 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.

ElectriCities proposes to rewrite Rule R8-66(c) as follows:

(c) In order for the renewable energy certificates derived from a renewable energy facility, including a facility that is located outside of the State of North Carolina, to comply with G.S. 62-133.8(b), (c), (d), (e) and

(f), the renewable energy facility that generated such renewable energy certificates must be registered pursuant to (b) above during the year(s) in which the certificates were earned or as otherwise provided in this subsection (c). The owner of a renewable energy facility may register its renewable energy facility in any year after the year(s) in which renewable energy certificates were earned such that such certificates comply with G.S. 62-133.8(b), (c), (d), (e) and (f), by requesting in its registration application that it be registered in the year in which the registration statement is filed as well as for the year(s) in which such certificates were earned, and including in its registration statement, not only current information and submittals, but also, the required information or submittals for the year(s) corresponding to the year(s) in which the certificates were earned.

ElectriCities maintains that its proposed changes to subsection (c) are designed to clarify that RECs that are earned by a then unregistered renewable energy facility can be used for compliance by an electric power supplier if the renewable energy facility seeks registration and includes as part of the registration application satisfactory information relating to the year in which the RECs were earned, as well as the current year.

The Public Staff raises issues regarding ElectriCities' proposal. It states that ElectriCities' proposed changes would eliminate the existing requirement that a facility be registered before its RECs are resold. Moreover, the Public Staff is concerned that ElectriCities did not also propose to modify the third sentence of subsection (b), under which a facility must be registered before its RECs are referenced in an electric power supplier's compliance report; nor did it propose to modify the requirement of Rule R8-67(c) that "any renewable energy certificates to be carried forward," as well as any RECs to be retired for REPS compliance, be identified in the annual compliance report. The Public Staff asserts that, if ElectriCities' rewrite of Rule R8-66(c) were adopted, it would be in tension with these other provisions. The Public Staff is concerned that, if ElectriCities' proposal is approved, a utility in the future may purchase a quantity of RECs dating back to the initial operation of a facility that has been operating for several years but has only recently registered, and may seek to recover the incremental costs of these RECs from ratepayers through the REPS Experience Modification Factor (EMF) rider. It might be difficult to verify the legitimacy of RECs whose underlying energy was produced such a long time previously.

The Public Staff states that, when NC-RETS begins operation, it will be important to enter RECs into the system as soon as possible after they are earned. Until a renewable energy facility is registered, however, it cannot establish an NC-RETS account, and its RECs cannot be entered into the tracking system. The Public Staff believes renewable energy facilities should register promptly and record their RECs in NC-RETS without delay, and that ElectriCities is asking the Commission to do exactly the opposite of what is needed. In addition, the Public Staff has taken the position that if a facility is not registered, payments to that facility may not be recovered by a utility



through its REPS rider. The Public Staff states that it is not aware that any utility has taken issue with its position in this regard.

As an alternative to ElectriCities' proposal, the Public Staff recommends that the Commission modify Rule R8-66(c) as follows:

(c) The owner of each renewable energy facility required to register under subsection (b) of this Rule shall register prior to selling or otherwise transferring any renewable energy certificates that it has earned to any electric power supplier. In addition, eEach 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.<sup>5</sup>

The practical effect of the currently existing requirements is that RECs earned by a renewable energy facility prior to registration may be used for REPS compliance; however, the facility must be registered before either (a) any RECs that it has sold to a re-seller can be resold to an electric power supplier, or (b) any RECs that it has sold can be included in an electric power supplier's compliance report, whether for the purpose of using them for REPS compliance or for the purpose of banking them for future use. Thus, if a facility earns RECs in January 2011 and immediately sells them to Duke, Duke will need to make reference to them in its compliance report for 2011, which, under the existing rules, is due in February 2012. Accordingly, the facility must be registered by February 2012. If, however, the RECs earned in January 2011 are sold to some purchaser who proceeds to resell them a few days later, then the facility must register by the time the resale occurs.

The Commission notes that the current rules were developed before it had established the functional requirements for NC-RETS and early in the Commission's experience with REC registries around the country. The Commission was concerned that RECs emanating from renewable energy facilities in North Carolina would be sold and re-sold prior to the existence of a third-party tracking system. The tracking system now in place will help ensure the legitimacy of each REC and also help ensure that each facility from which RECs emanate is eligible to create RECs for REPS compliance. The Commission believes that its rules should encourage the issuance of RECs in a

---

<sup>5</sup> The term "electric power supplier" is defined in G.S. 62-133.8(a)(3) to include only entities that sell power to North Carolina retail customers. Thus, the proposed language would not require a renewable energy facility to register in North Carolina before selling its RECs to a utility whose retail customers are all outside the State, or to any entity that is not a North Carolina electric power supplier. Before such a purchaser could resell the RECs to a North Carolina electric power supplier for REPS compliance purposes, however, it would have to ensure that the facility is registered.

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. Therefore, beginning January 1, 2011, renewable energy facilities registered in NC-RETS will only be allowed to enter historic energy production data for REC issuance that goes back up to two years from the then current date. Renewable energy facilities participating in other registries will have to abide by their registries' rules regarding the entering of historic metering data for REC issuance.<sup>6</sup> (As provided in Rule R8-67(d)(1), RECs associated with energy generated prior to January 1, 2008, cannot be used for compliance with the North Carolina REPS.) The Commission will add this provision to the new Rule R8-67(h)(4), as shown in Appendix A. The Commission will decline to adopt the provision proposed by Electricities for the reasons cited by the Public Staff. The Commission will also decline to adopt the alternative provision proposed by the Public Staff, believing other rules, including the new Rule R8-67(h)(4), make it unnecessary.

#### Issue 21: Option To Deny A Registration

Rule R8-66(e) currently allows the Commission to accept a registration or set the matter for hearing. The Commission notes that it might also have good cause to deny a registration without a hearing, and so it will add that procedural option to Rule R8-66(e), as shown in Appendix A.

#### Issue 22: Automatic Registration In NC-RETS

Rule R8-66(e) describes the timeline and process for Public Staff review and Commission approval of registration statements filed by owners of renewable energy facilities. Electricities proposes to add the following sentence to Rule R8-66(e): "Upon acceptance of its registration by the Commission hereunder, the facility shall automatically be registered under the North Carolina REC Tracking System."

The Public Staff does not believe that this language is practicable. The responsibility for creating an account in NC-RETS rests upon the owner of the facility, not the Commission. Furthermore, it is acceptable for facilities, especially those located outside of North Carolina that are already participating in a different tracking system, to decline to participate in NC-RETS. The Commission agrees with the Public Staff and, therefore, declines to adopt the language proposed by Electricities.

---

<sup>6</sup> The Commission acknowledges that there are renewable energy facilities located in North Carolina that are interconnected with Dominion and that participate in PJM's Generation Attribute Tracking System (GATS). It is not the Commission's intent to disrupt those situations or to preclude additional North Carolina generators from participating in GATS in the future, should they be interconnected with Dominion or participate in the PJM market.

### Issue 23: Revocation Of Registration Of Renewable Energy Facility

Rule R8-66(f) describes the actions that may result in revocation of a renewable energy facility's registration. Duke proposes to add the following new subdivision (5) to Rule R8-66(f): "The Commission shall establish a generic docket to which all registration statement revocations shall be posted." The Public Staff agrees with Duke's proposal, but believes that it would also be helpful for the State's electric power suppliers and other interested parties to have available, in that same generic docket, a list of facilities that have failed to file their annual recertification by the April 1 deadline and thus are at risk of revocation. In addition, as a technical matter, the Public Staff notes that Duke's proposed language could most appropriately be designated as a new subsection (g), since the four existing subdivisions of subsection (f) all identify types of conduct that may result in revocation of registration. The Public Staff therefore recommends, as an alternative to Duke's proposal, that the following new subsection (g) be added to Rule R8-66:

(g) The Commission shall establish a generic docket to which all registration statement revocations shall be posted. As soon as practicable after April 1 of each year, the Commission shall also post in that docket a list of all renewable energy facilities that have failed to make the annual filing required by Rule R8-66(b)(10).

The Commission agrees with the Public Staff and Duke that it would be helpful for electric power suppliers to be able to easily track which facilities are no longer able to create valid RECs. However, rather than establish a system that would require submissions, pleadings and orders relative to revocation processes to be captured in two dockets (the facility's docket and a generic revocation docket), the Commission will require NC-RETS to (1) post on its website a list of facilities whose registrations have been revoked by the Commission, and (2) provide an automated electronic mail notification to NC-RETS participants and other individuals on the NC-RETS distribution list whenever a facility is added to the revocation list.

The Commission notes that its rules currently do not address the consequences to the owner of a renewable energy facility that fails to provide its annual recertification. The Commission, will, therefore, amend Rule R8-66(f) as shown in Appendix A to include failure to provide the annual recertifications required in Rule R8-66(b) among the actions that may result in revocation of registration by the Commission.

### Issue 24: Material Changes At Renewable Energy Facilities

The Commission further notes that, with the advent of NC-RETS, it is necessary for the Commission and, by extension, the NC-RETS Administrator, to be informed as soon as possible as to (1) the change in ownership of a renewable energy facility; and (2) a change in kinds of fuel consumed by a renewable energy facility. This is necessary to ensure that RECs emanating from energy produced by the facility are issued to the legal owner of the facility and to make sure that each REC's designation (e.g., poultry

waste versus biomass) is accurate. Therefore, the Commission will add a further provision, the new Rule R8-66(h) as shown in Appendix A, requiring owners of renewable energy facilities to inform the Commission and the appropriate REC tracking system within 15 days of any material changes in their status, such as an ownership change, fuel type change, or permit revocation. The Commission will also require a renewable energy facility owner to notify the Commission if it wants to withdraw its registration.

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

Rule R8-67 creates the processes and requirements for each electric power supplier to demonstrate its compliance with REPS. It establishes the requirement that electric power suppliers shall annually file both a REPS compliance plan and a REPS compliance report. It establishes the process for electric public utilities to seek cost recovery for REPS incremental costs in a rider. This Rule also establishes requirements for metering at renewable energy facilities. On January 27, 2010, the Commission issued an Order Proposing Rules and Requesting Comments in Docket No. E-100, Sub 121, in order to add provisions to Rule R8-67 regarding establishment of a REC tracking system.

#### **Issue 25: Definition Of Avoided Cost Rates**

Rule R8-67(a)(2) provides a definition of "avoided cost rates" that is a key determinant of the REPS incremental costs that can be recovered in the REPS Rider. Duke proposes to change Rule R8-67(a)(2), asserting that the definition of "avoided cost rates" should be modified in order to allow greater flexibility and ensure that the definition reflects an electric power supplier's actual avoided costs at the time of contract execution. To accomplish this, Duke proposes to revise the first two sentences of the definition as follows:

"Avoided cost rates" mean an electric power supplier's most recently approved or established avoided cost rates in North Carolina, as of the date the contract is executed, for purchases of electricity from qualifying facilities pursuant to the provisions of Section 210 of the Public Utility Regulatory Policies Act of 1978, provided, however, when determined by the Commission to be in the public interest, 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. Unless the Commission determines otherwise, 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.

Duke states that this revision would "avoid the impact of regulatory lag on avoided cost rates and allow for the use of updated estimates in appropriate situations when circumstances have changed since the Electric Power Supplier's most recent avoided cost rates were approved by the Commission."

Dominion and the Public Staff agree in concept with Duke's proposed change, which would give the Commission discretion in appropriate circumstances to adopt a method of calculating avoided costs that is different from the exact procedure specified in the Rule,<sup>7</sup> noting that the Commission did just that in PEC's 2009 REPS rider proceeding.<sup>7</sup> In order to maximize the Commission's discretion and ensure that it may be exercised on a case-by-case basis, the Public Staff recommends certain modifications to Duke's proposed language. The Public Staff proposes that subdivision (a)(2) be revised as follows:

(2) For purposes of determining an electric power supplier's avoided costs, "Aavoided cost rates" mean an electric power supplier's most recently approved or established avoided cost rates in North Carolina~~this State~~, as of the date the contract is executed, for purchases of electricity from qualifying facilities pursuant to the provisions of 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 such ~~at 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,; provided, however, that development of such estimates of avoided cost by an electric public utility shall include taking into consideration of 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.

---

<sup>7</sup> In Docket No. E-2, Sub 948, the Public Staff supported PEC's use of current year (2009), rather than PEC's approved 2007 avoided cost rates, because PEC's approved rates "were no longer reflective of the Company's avoided costs." The Order stated that "The Commission finds the reasoning of PEC and the Public Staff persuasive and approves the application of PEC's avoided cost rates for the purposes of calculating PEC's REPS rates." (Page 14 of the November 12, 2009 Order.)

NCSEA opposes Duke's proposed change, but did not provide a reason, other than arguing that the Commission should reject any "substantive changes" as being "beyond the scope of this proceeding."

The Commission agrees with the Public Staff that it has allowed such an alternative calculation of avoided cost rates in the past, and finds that the Rule should be modified to allow such a practice in future proceedings. The Commission shall, therefore, adopt the Public Staff's proposed revisions to Rule R8-67(a)(2), as shown in Appendix A.

#### Issue 26: Calculation Of Number Of Customer Accounts

Rule R8-67(a)(4) provides a definition of "Year-end number of customer accounts." The number of accounts is important because it is used to determine the amount of money an electric power supplier can spend on REPS compliance before hitting the per-customer cost caps established in G.S. 62-133.8(h)(4). Duke proposes to revise the definition of "year-end number of customer accounts" in order to ensure that it is consistent with the decisions issued by the Commission in the 2009 REPS rider proceedings for Duke and PEC. The Public Staff and Dominion agree with Duke's proposed change, which is as follows:

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

NCSEA opposes Duke's proposal, stating "while perhaps intended as clarifications, these changes appear to have a substantive component and should not be made in the context of a proceeding designed to deal with process." NCSEA did not provide a substantive basis for opposing Duke's proposal, and several parties support it.

The Commission agrees with Duke that the proposed change is consistent with the practice employed by the Commission. The determination of number of customer accounts as reported to the EIA has been the starting point in each proceeding before the Commission. In Rule R8-67(c)(4) the Commission, however, allowed electric power suppliers to propose an alternative method of determining number of customer accounts. The Commission will, therefore, adopt the change to Rule R8-67(a)(4) proposed by Duke and as shown in Appendix A.

### Issue 27: Minor Editorial Changes

Rule R8-67(b) specifies that electric power suppliers shall annually file with the Commission a REPS compliance plan covering the current and subsequent two calendar years. For an electric power supplier subject to Rule R8-60 [integrated resource planning], the REPS compliance plan shall be filed and reviewed with its integrated resource plan.

ElectriCities proposes a minor editorial change to subdivision (b)(1) to clarify that the REPS compliance plan shall cover "the calendar year in which the plan is filed ...". Since no party objected to the change, and because the change is helpful, the Commission finds good cause to adopt the unopposed change proposed by ElectriCities and as shown in Appendix A. In addition, the Commission will amend Rule R8-67(b)(1) to allow for the filing of REPS compliance plans by a utility compliance aggregator. (See Issue 37.)

### Issue 28: Timing Of REPS Compliance Plans And REPS Compliance Reports

Rule R8-67(b)(2) requires each electric power supplier to file its REPS compliance plan by September 1 of each year. Rule R8-67(b)(3) requires each electric power supplier that is subject to the Integrated Resource Planning (IRP) Rule (R8-60) to file its REPS compliance plan with its IRP, which is due September 1 each year. Commission Rule R8-67(c)(2) requires each electric public utility to file its annual REPS compliance report at least 30 days before it files the information required for its annual fuel proceeding. Rule R8-67(c)(3) requires each electric membership corporation (EMC) and municipal electric supplier to file its REPS compliance report by September 1 each year. Finally, Rule R8-67(e)(1) provides that an annual rider hearing to review REPS costs for electric public utilities "will be scheduled as soon as practicable after" each electric public utility's annual fuel proceeding hearing.<sup>8</sup>

NCSEA proposes extensive changes to subsection (b) of Rule R8-67, with the intention of separating the review of REPS compliance plans from the IRP process. Under NCSEA's proposal, all electric power suppliers would be required to file their REPS compliance plans by March 1 rather than the current September 1. The Commission would complete its review of the REPS compliance plans prior to the September 1 filing date for IRPs, and each electric power supplier required to file an IRP – that is, the electric public utilities and EMCs – would include its approved REPS compliance plan in its IRP. NCSEA expresses frustration with the slow pace of IRP proceedings, and especially with the fact that any delay in reviewing a supplier's IRP carries with it a corresponding delay in review of its REPS compliance plan. NCSEA notes, for example, that the REPS compliance plans filed in 2008 were for the period

---

<sup>8</sup> Pursuant to Rule R8-55, annual fuel hearings are staggered throughout the year, with Duke's hearing scheduled in May, PEC's hearing scheduled in August, and Dominion's hearing scheduled in November.

2008-10; it is now 2010, the final year covered by the plans, and NCSEA states that the Commission's review of these plans may not be completed until late this year.<sup>9</sup>

PEC opposes NCSEA's proposal to require electric power suppliers to file REPS compliance plans by March 1 and to file approved REPS compliance plans with IRPs by September 1 each year. PEC states that NCSEA's proposed timeline is "unworkable." Similarly, NCEMC and Electricities oppose a March 1 REPS compliance plan filing date, with Electricities stating that:

. . . neither of North Carolina Eastern Municipal Power Agency or North Carolina Municipal Power Agency Number 1 . . . , each of which is filing consolidated REPS Compliance Plans and REPS Compliance Reports on behalf of its members, will receive information concerning its members' retail sales for the prior year before May of each report year . . . . As a result, the Power Agencies would be unable to file . . . before July . . . .

While the Public Staff sympathizes with NCSEA's frustration, it does not support separating the review of the REPS compliance plan from the review of the IRP. Instead, the Public Staff suggests that the problem might be addressed by requiring the REPS compliance plan to address the three, rather than two, coming years, while also *containing an update on the current year. Under this approach, the REPS compliance plan filed in September 2010 would not cover the years 2010-12, as the Commission's rules currently provide; instead, it would cover the period 2011-13, but it would also include an update on the electric power supplier's plans for compliance in 2010.*

The Public Staff states that the primary reason for linking the REPS compliance plan with the IRP is that these two documents are closely intertwined. If a utility's resource planning process is truly integrated, it must encompass planning for renewable generation resources as well as traditional nonrenewable resources. More specifically, subdivision (i)(7) of Rule R8-60, the rule that governs IRPs, provides that a utility must include an assessment of alternative supply-side energy resources in its IRP report. Rule R8-60(e) states that "[a]lternative supply-side energy resources include, but are not limited to, hydro, wind, geothermal, solar thermal, solar photovoltaic, municipal solid waste, fuel cells, and biomass." The Public Staff believes that this assessment is closely related to an electric power supplier's plan for REPS compliance.

The Public Staff argues further that another reason why the review of the REPS compliance plan and the IRP are closely linked is that both of these documents serve the same purpose. The great majority of proceedings before the Commission are designed to resolve substantive issues. The annual IRP proceeding, however, is different. In State ex rel. Utilities Commission v. North Carolina Electric Membership

---

<sup>9</sup> The hearings in Docket No. E-100, Subs 118 and 124 (the 2008 and 2009 IRP dockets) were held in March of 2010. On May 11, 2010, the Public Staff requested an extension of time to file proposed orders and briefs, which the Commission granted. Proposed orders and briefs were filed June 11, 2010, and the Commission's order is pending.



Corp., 105 N.C. App. 136, 143-44, 412 S.E.2d 166, 170 (1992), the Court of Appeals stated:

General Statutes section 62-110.1(c) makes it clear that the only purpose of a least-cost planning proceeding is to assist the Utilities Commission in 'develop[ing], publiciz[ing], and keep[ing] current an analysis of the long-range needs for expansion of facilities for the generation of electricity in North Carolina.' Nowhere is it suggested in section 62-110.1(c) that the purpose of the proceeding is to issue directives which fundamentally alter a given utility's operations. Rather, we believe that the least-cost planning proceeding should bear a much closer resemblance to a legislative hearing, wherein a legislative committee gathers facts and opinions so that informed decisions may be made at a later time.

The Public Staff notes that, if an issue is identified in an IRP proceeding that requires a substantive decision, such as issuance or cancellation of a CPCN to construct a generating facility, the Commission addresses that issue in a separate docket. Similarly, the Commission's REPS compliance plan rule, Rule R8-67(b)(3), states that "[a]pproval of the REPS compliance 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 GS 62-133.8(b), (c), (d), (e), and (f)." Because of the unique nature of the REPS compliance plan and the IRP, the Public Staff believes it is appropriate that the REPS compliance plan be included in the IRP and be reviewed together with the IRP.

Duke, like NCSEA, proposes major changes in the schedule for reviewing an electric power supplier's annual REPS compliance plan, its REPS compliance report, its IRP, and, in the case of an electric public utility, its REPS rider filing. Under Duke's proposal to amend Rule R8-67(c)(2), a utility's REPS compliance plan, its REPS compliance report, and its REPS rider application would all be due on the same date as the information required for an electric public utility's annual fuel proceeding – for Duke, in early March -- and the utilities' IRPs would continue to be filed in September. Duke argues that the current processes "result in three (3) separate REPS filings with two (2) distinct evaluation and review periods." Duke states that "it makes sense for the Compliance Report to be submitted for review contemporaneously with the application for REPS cost recovery. In this way, a single set of direct testimony can be submitted in support of a utility's Compliance Report and application for cost recovery under REPS." Duke argues that REPS compliance plan filings should coincide with the REPS compliance report and cost recovery filings "so that all aspects of the REPS compliance process can be reviewed and evaluated in a consolidated fashion." PEC supports Duke's proposal to consolidate the REPS compliance plan, report, and cost recovery filings.

The Public Staff agrees with Duke that it is appropriate for a utility to file its REPS compliance report at the same time it files its REPS rider application, rather than

30 days in advance of the rider application as the Rule currently requires. However, as discussed above, the Public Staff believes that the REPS compliance plan should continue to be filed at the same time as, and should constitute a part of, the IRP.

Dominion proposes that it be allowed to file its annual REPS compliance report at the same time as it now files its REPS compliance plan and IRP, or, in the alternative, at the same time as it now files its REPS rider application. Similarly, PEC and NCEMC do not support NCSEA's proposal, with NCEMC arguing that the REPS compliance plan and IRP filings are "inextricably linked and mutually dependent."

NCSEA proposes that all electric power suppliers be required to file their REPS compliance reports on March 1. NCSEA states that its proposal would make more information available to interested parties so that they can develop a better understanding of the suppliers' compliance activities. NCSEA notes that it is not proposing to make corresponding changes in the schedule for hearings on compliance reports; it believes that the Commission should continue to review the utilities' reports in their REPS rider proceedings.

The Public Staff notes that the filing dates for Duke's REPS compliance report, and its REPS rider application, are currently very close to NCSEA's proposed March 1 deadline.<sup>10</sup> The Public Staff believes, however, that it is inadvisable for the REPS compliance reports of PEC and Dominion to be filed on March 1 and then sit on the shelf until the companies file their rider applications. According to the Public Staff, it is possible that between March 1 and the filing deadline for their rider applications, PEC and Dominion would become aware of information that enables them to file more accurate REPS compliance reports. As to whether the EMCs and municipalities should be required to file their REPS compliance reports on March 1, as NCSEA proposes, or on September 1, as Rule R8-67(c)(3) currently provides, the Public Staff believes that both deadlines are equally acceptable and encourages the Commission to adopt whichever deadline will promote scheduling efficiency and minimize backups and delays.

ElectriCities, on the other hand, states that neither the North Carolina Eastern Municipal Power Agency nor the North Carolina Municipal Power Agency Number 1, each of which files consolidated REPS compliance plans and reports on behalf of its members, will receive information concerning its members' retail sales for the prior year before May of each reporting year. As a result, the power agencies would be unable to file their REPS compliance reports before July of each year. Therefore, ElectriCities proposes that any change in the due date for the Power Agencies' filing their REPS compliance reports be no earlier than July 1. Similarly, NCEMC opposes NCSEA's proposal to require power suppliers to submit their REPS compliance reports on March 1.

---

<sup>10</sup> Rule R8-67(c)(2), as currently worded, actually requires Duke to file its compliance report in early February. However, the Commission authorized Duke to delay filing its 2009 report until early March 2010, and the Public Staff, in its comments in this proceeding, does not oppose Duke's request to make this change permanent.

Rule R8-67(c)(2) requires the REPS compliance reports to be filed in advance of the REPS rider application in order to allow more time for review by the Public Staff and others. For the reasons argued by the Public Staff, the Commission will amend Commission Rule R8-67(c)(2) as shown in Appendix A such that REPS compliance reports are filed concurrently with an electric public utility's REPS rider filing. The Commission continues to agree with NCEMC and the Public Staff that the REPS compliance plans and IRPs are inextricably linked and mutually dependent, and will, therefore, retain the requirement that REPS compliance plans be filed concurrently with IRPs. The Commission agrees with Duke that compliance reports should be filed the same day as the information needed for annual fuel proceedings, for electric public utilities. The Commission declines to adopt NCSEA's proposed March 1 deadline for the filing of REPS compliance reports and REPS compliance plans for the reasons stated by the electric power suppliers and the Public Staff.

#### Issue 29: EMC Compliance Plans Informational Only

Rule R8-67(b)(4) states that a REPS compliance plan filed by an electric power supplier that is not subject to the IRP Rule R8-60 "shall be for information only."

Duke proposes that REPS compliance plans filed by the State's EMCs should be informational only, as are the plans filed by municipalities. The Public Staff disagrees with Duke's proposal that the REPS compliance plans of the State's EMCs be considered "for information only." The Public Staff notes that the Commission's jurisdiction over EMCs is more extensive than its jurisdiction over municipalities. For example, EMCs are required to file IRPs while municipalities are not. The Public Staff asserts that the Commission's review of the EMCs' REPS compliance plans should not be subject to the same limitations as those that apply to municipalities.

The Commission agrees with the Public Staff that REPS compliance plans filed by EMCs should be reviewed and approved as part of the IRP process, and will, therefore, reject Duke's proposal to make EMC compliance plans informational only.

#### Issue 30: Proposal To Prohibit Redaction Of REC Contract Information

Rule R8-67(b)(1)(ii) requires each electric power supplier to include in its REPS compliance plan "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." NCSEA proposes to add language prohibiting an electric power supplier from redacting this list. NCSEA argues that renewable energy developers and investors need information regarding how many RECs are needed and what kind of RECs are needed. NCSEA states that "Duke redacted all of its megawatt-hour or REC information" from its REPS compliance plan in Docket No. E-100, Sub 118.

While the Public Staff expresses support for NCSEA's desire to make this information available to the public, the Public Staff nevertheless points out that electric power suppliers have a right to file their contract lists confidentially. PEC, ElectricCities, NCEMC, Dominion, and Duke oppose NCSEA's proposal, with Duke arguing that it does not streamline the Commission's rules "and would merely serve to benefit NCSEA's members at the expense of the utilities' respective customers." Duke asserts that "market information related to a utility's respective compliance position in the face of a statutory and regulatory mandate can significantly impact pricing," and "NCSEA's allegations regarding the relative lack of demand information in the marketplace are simply incorrect."

Further, Duke notes that commercial information regarding the cost estimates of new generation resources constitute a trade secret under G.S. 66-153 and thus warrant confidential treatment under G.S. 132-1.2.

The Commission notes that, in other proceedings, utilities have objected to filing REC data, asserting that it is subject to trade secret protection. The Commission does not believe it is appropriate to decide such a matter in a rulemaking proceeding, but rather in the context of a specific case with specific facts. The Commission will, therefore, decline to adopt NCSEA's proposed amendment to prohibit an electric power supplier from redacting information regarding REC contracts.

#### Issue 31: Electric Power Suppliers Must Register Renewable Energy Facilities Before Filing REPS Compliance Plans

Rule R8-67(b)(1)(ix) requires an electric power supplier to include in its annual REPS compliance plan:

the electric power supplier's registration information and certified statements required by Rule R8-66, to the extent they have not already been filed with the Commission.

Duke proposes to delete Rule R8-67(b)(1)(ix), but did not provide any rationale for the deletion. The Commission notes that this provision was intended to address the situation in which an electric power supplier is also an owner of a renewable energy facility and to provide a deadline (the compliance plan filing date) by which such an electric power supplier must register the facility with the Commission. The Commission believes this requirement is still appropriate and will, therefore, not adopt Duke's proposal to delete it. The Commission will instead amend the provision so that it simply sets a deadline, the date when the electric power supplier files its REPS compliance plan, for an electric power supplier to also file registration statements for renewable energy facilities that it owns. The Commission will amend R8-67(b)(1)(ix) as show below and in Appendix A:

(ix) ~~the electric power supplier's registration information and certified statements required by Rule R8-66, to the extent they have not already~~

been 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.

#### Issue 32: Proposal To Allow Intervening Parties To File REPS Compliance Plans

NCSEA proposes to amend Rule R-67(b)(2) such that "the Public Staff or any other intervenor may file a REPS compliance plan of its own as to any electric power supplier . . . ." NCSEA did not provide any comments explaining why this change is needed or how it would streamline administration of Senate Bill 3. Existing rules allow intervenors to provide comments regarding any electric power supplier's REPS compliance plan filed as part of its IRP. Specifically, Rule R8-60(j), allows an intervenor to "file an integrated resource plan or a report of its own as to any utility . . . ." Therefore, the Commission finds that intervenors already have ample opportunities to influence REPS compliance plans, and the Commission concludes that it should decline to adopt NCSEA's proposed amendment.

#### Issue 33: Testimony And Hearings For REPS Compliance Reports

ElectricCities proposes to delete the introductory language in Rule R8-67(c)(1) requiring that each electric power supplier's REPS compliance report include "supporting documentation and direct testimony and exhibits of expert witnesses." In the Public Staff's view this proposed change would serve no useful purpose because there will always be a hearing to determine whether the electric power supplier filing a REPS compliance report has in fact complied with the REPS, and at some point the electric power supplier will need to file testimony and exhibits.

It is customary in Commission proceedings that when a regulated entity files a report that will be the subject of an evidentiary hearing, the accompanying testimony and exhibits are filed concurrently with the report. However, because of the annual nature of REPS filings, the Commission believes a hearing might not always be needed for all EMCs and municipal power suppliers. The Commission agrees with the Public Staff that the requirement to file supporting documentation is important, as it will assist in the determination as to whether a hearing is needed. The Commission, will, therefore, retain this requirement for REPS compliance reports filed by all electric power suppliers, but will amend Rule R8-67(c)(1) and (2) as shown in Appendix A to clarify that only electric public utilities must file direct testimony and exhibits of expert witnesses with their REPS compliance reports.

Rules R8-67(c)(3) states as follows:

(3) Each electric membership corporation and municipal electric supplier shall file an REPS compliance report on or before September 1 of each year. The Commission shall 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 additional direct and rebuttal testimony and exhibits.

The Commission finds that it may not always be necessary to schedule a hearing for electric membership corporations and municipal electric suppliers as currently required by Rule R8-67(c)(3). Therefore, the Commission will amend the Rule as shown in Appendix A to make the hearing optional, at the Commission's discretion, rather than mandatory. The Commission will also amend Rule R8-67(c)(3) to provide that (1) utility compliance aggregators may file REPS compliance reports on behalf of electric membership corporations and municipal electric suppliers, and (2) REPS compliance reports must be verified. (See Issue 37 for an explanation of utility compliance aggregators.)

#### Issue 34: Editorial Changes

ElectriCities' proposes to change Rule R8-67(c)(1)(i) as follows:

(i) ~~the sources, amounts, and costs of for each~~ renewable energy certificates, ~~by source~~ certificate used to comply with G.S. 62-133.8(b), (c), (d), (e), and (f): the sources, amounts, and costs of such renewable energy certificates, by source, and the name and address of the renewable energy facility producing such renewable energy certificates. 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;

The Public Staff states that ElectriCities' proposed revisions are editorial in nature and are not objectionable in themselves, but they are contingent on ElectriCities' proposed deletion of paragraph (c)(1)(viii). Since the changes proposed by ElectriCities appear to be unnecessary, the Commission will decline to adopt them.

#### Issue 35: REPS Compliance Reports To Include Information Regarding RECs To Be Carried Forward

Rule R8-67(c)(1)(vii) currently provides that a REPS compliance report must include "the identification of any renewable energy certificates to be carried forward...". ElectriCities proposes to modify this language to read "the identification of any renewable energy certificates, electric power, or savings to be carried forward." The Public Staff and Dominion agree with this change, and state that it is consistent with the Commission's current practice. The Commission will, therefore, adopt ElectriCities' proposal with one change: since qualifying "electric power," whether purchased or produced by the electric power supplier itself, must be converted into RECs, it is not necessary to list it separately. Thus, the Commission will amend Rule R8-67(c)(1)(vii)

as shown in Appendix A to read: "the identification of any renewable energy certificates or energy savings to be carried forward..."

### Issue 36: Information Required In REPS Compliance Reports

Rule R8-67(c)(1)(viii) lists some of the information required to be filed in a REPS compliance report:

For each renewable energy facility providing renewable energy certificates used by the electric power supplier to comply with G.S. 62-133.8(b), (c), (d), (e) and (f): the name, address, and owner of the renewable energy facility; and an affidavit from the owner of the renewable energy facility certifying that the energy associated with the renewable energy certificates was derived from a renewable energy resource, identifying the renewable technology used, and listing the dates and amounts of all payments received from the electric power supplier and all meter readings;

Duke, Dominion, and Electricities propose to eliminate much of the information currently required in REPS compliance reports, including the affidavits from renewable energy facilities verifying that all RECs provided to the supplier filing the report were in fact derived from renewable energy resources, specifying the renewable technology used, and listing the dates and amounts of payments received and the associated meter readings. Duke, Dominion, and Electricities contend that the requirements of this paragraph are onerous and that the information required can be supplied more easily through NC-RETS rather than through affidavits. The Public Staff states that it would not object to eliminating paragraph (c)(1)(viii) if the information now being provided through affidavits could be made available via NC-RETS.

It is the Commission's understanding that the tracking of RECs in NC-RETS will make most of the information requirements in R8-67(c)(1)(viii) redundant. Specifically, each REC will contain a unique serial number that specifies the facility from which it originated, the month and year in which the associated energy was produced, and the renewable technology or fuel that produced that energy. A REC cannot be imported into NC-RETS unless the facility from which it emanated is registered with the Commission. Each facility that registers with the Commission must provide information as to the ownership and location of the facility. And the owner must certify in that registration, and annually thereafter, that its facility remains a "renewable energy facility." Therefore, given the Commission's more informed understanding of the functionality to be provided by NC-RETS, the Commission believes that functionality, combined with the requirements for registering renewable energy facilities, makes many of the data requirements contained in Rule R8-67(c)(1)(viii) unnecessary, with the exception of the requirement to provide "the dates and amounts of all payments received from the electric power supplier." That information is still necessary because it impacts the electric public utility's rider request and all electric power suppliers' calculations regarding the customer cost cap. In that context the Commission believes it is more

appropriate for the burden of proving such costs to fall squarely on the electric power suppliers. Therefore, the Commission will modify this requirement somewhat by shifting the responsibility for this data from the renewable energy facility owner to the electric power supplier. The Commission now believes it is appropriate for each electric power supplier to rely on invoices from REC suppliers (rather than on affidavits from renewable energy facility owners) in developing and supporting its REPS compliance report. Therefore, the Commission will amend Rule R8-67(c)(1)(viii) as shown in Appendix A such that electric power suppliers must include in their REPS compliance reports, "the dates and amounts of all payments made for renewable energy certificates." The Commission agrees that the advent of NC-RETS eliminates the need for affidavits from the owners of renewable energy facilities whose RECs are being used by an electric power supplier for REPS compliance. The Commission will, therefore, eliminate the requirement that such affidavits be included with REPS compliance reports, as shown in Appendix A. However, in making this rule change, the Commission is not limiting the Public Staff's authority to audit a renewable energy facility's books and records, as provided for in Rule R8-66(b)(5) and R8-66(f)(4), if the Public Staff believes such an audit is required.

Issue 37: Utility Compliance Aggregators May File REPS Compliance Plans And Reports For Electric Power Suppliers; Electric Power Suppliers May Comply As A Group

Rule R8-67(c)(1) states that:

Each year, beginning in 2009, each electric power supplier 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...

Rule R8-67(c)(3) states, in part:

Each electric membership corporation and municipal electric supplier shall file an REPS compliance report on or before September 1 of each year.

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

Each year, beginning in 2008, each electric power supplier 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).

GreenCo, NCEMPA, NCMPA1, Dominion, Duke, and PEC have each filed submittals in various dockets indicating that they will be providing REPS reporting services on behalf of either their members or a group of electric power suppliers that includes themselves. The Commission has approved these arrangements, granting waivers of its rules as requested. The Commission believes that it is appropriate to



accommodate these arrangements in its rules. Therefore, the Commission will include a new Rule R8-67(a)(5), as shown in Appendix A, to define a "utility compliance aggregator" as an "organization that assists an electric power supplier in demonstrating its compliance with REPS." An electric public utility that provides REPS compliance services for an electric membership corporation or municipality must demonstrate compliance for those organizations separately from itself because the allowable compliance methods and REPS obligations differ. The Commission will, therefore, add Rule R8-67(c)(6) to clarify that "a group of electric power suppliers may aggregate their REPS obligations and compliance efforts provided that all electric power 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)." The Commission will also amend Rule R8-67 to clarify in the same Rule and as shown in Appendix A, that if a group of electric power suppliers has aggregated its REPS obligations and compliance efforts, and subsequently the Commission concludes that the group has failed to meet its REPS obligations, the Commission shall find and conclude that each electric power supplier in the group, individually, has failed to meet its REPS obligations. The Commission will amend Rule R8-67(a)(5) as shown in Appendix A to also allow a "designated utility compliance aggregator" to file a REPS compliance plan on behalf of an electric power supplier. Similarly, the Commission will amend Rule R8-67(c)(1) as shown in Appendix A to allow a "designated utility compliance aggregator" to file a REPS compliance report for an electric power supplier.

#### Issue 38: Recovery Of Stranded REC Costs

PEC proposes to add a new sentence at the end of Rule R8-67(c)(4). The purpose of the additional language, as PEC explains it, is to protect an electric power supplier against the possibility of incurring stranded costs if the Commission revises its procedure for calculating the annual utility-wide ceiling on incremental REPS costs under G.S. 62-133.8(h)(3). The new sentence proposed by PEC is as follows:

If the Commission on its own motion or the motion of a party other than the electric power supplier, changes the methodology for determining the electric power supplier's cap on incremental costs, the effect of which is to reduce the cap, the Commission shall take all steps necessary to ensure the electric power supplier is allowed to recover all REPS contractual commitments made prior to the Commission changing the methodology to reduce the cap.

While Dominion and Duke support PEC's proposal, the Public Staff believes that PEC's proposed language is too broadly worded, arguing that an electric power supplier should not be assured of recovering "all REPS contractual commitments made prior to the Commission changing the methodology." It may be that even under the previously existing methodology, the electric power supplier would have exceeded the ceiling. It is also possible that some of the costs incurred by the electric power supplier prior to the

change in methodology were imprudent. As an alternative to PEC's proposal, the Public Staff recommends adding the following sentence to Rule R8-67(c)(4):

If the Commission, on its own motion or the motion of a party other than the affected electric power supplier, changes the methodology for determining the electric power supplier's annual limitation on aggregate incremental costs under G.S. 62-133.8(h)(3), in such a way as to effectually reduce the limitation, the Commission may take such steps as are just to ensure that the supplier is not compelled to absorb costs that it reasonably and prudently incurred in reliance on the previously existing methodology.

The Commission is not persuaded that the proposed changes are necessary. Rate-making decisions, such as that sought by PEC, are best addressed in the context of specific rate proceedings. The Commission is aware of its obligations under the traditional regulatory compact and will establish fair and reasonable rates as provided by law. Therefore, the Commission will decline to adopt either the language proposed by PEC or the language proposed by the Public Staff.

#### Issue 39: Recovery Of Costs For RECs From Renewable Energy Facilities Whose Registrations Are Revoked By The Commission

Duke proposes to add the following new sentence at the end of Rule R8-67(d)(3) in order to protect electric power suppliers against the possibility that they may lose RECs following the revocation of a renewable energy facility's registration:

Any renewable energy certificates earned by a renewable energy facility before the date the facility's registration is revoked by the Commission may be used to comply with G.S. 62-133.8(b), (c), (d), (e) and (f), and costs associated with those RECs may be recovered under G.S. 62-133.8(h).

Duke argues that, because an electric public utility can wait seven years after cost recovery before retiring a REC for REPS compliance, "the rules should clearly articulate the implication of a registration revocation on those RECs earned prior to the date of revocation."

The Public Staff is concerned that Duke's language might establish the right for the utility to use RECs earned prior to revocation for REPS compliance and to recover the costs of such RECs under G.S. 62-133.8(h). The Public Staff argues that a utility should not be assured of recovering the costs of RECs earned by a renewable energy facility prior to the revocation of its registration if the costs would cause the utility to exceed the per-account cap, or if the utility purchased the RECs imprudently. Moreover, the facility's registration may have been revoked because its RECs were only "pieces of paper" and did not in fact represent one megawatt-hour of renewable generation. The Commission should not be placed in the position of guaranteeing that a utility will be

able to recover the cost of fictitious RECs. When a facility's registration is revoked, a utility should ordinarily be permitted to recover the cost of valid RECs that it prudently purchased from the facility prior to revocation, but the Commission must have authority to invalidate RECs whose legitimacy cannot be established.

ElectriCities proposes to add to Rule R8-67(d)(3) a sentence that is very similar to the one proposed by Duke, except that it does not include the final clause relating to recovery of costs associated with RECs. ElectriCities contends that if a facility's registration is revoked, but subsequently the facility obtains reinstatement of its registration, RECs earned during the period of revocation should be eligible for REPS compliance.

The Public Staff disagrees with ElectriCities' position. RECs earned after reinstatement, including RECs bundled with the underlying electric energy, as well as those sold separately, should be eligible for REPS compliance. Similarly, those earned prior to revocation should also be eligible, subject to the possibility of invalidation by the Commission if their legitimacy cannot be established. However, during the period of revocation, a facility should not be able to earn RECs that are eligible for compliance. Revocation of a facility's registration should have meaningful consequences; specifically, those consequences should include the ineligibility of its RECs for REPS compliance.

The Commission declines to provide the assurances sought by Duke. A utility will be allowed to seek recovery of reasonable and prudently incurred costs. However, in some cases, its recourse will be against the REC supplier rather than the utility's customers. Similarly, the Commission declines to adopt ElectriCities' proposed amendment for the reasons stated by the Public Staff.

Issue 40: Recovery Of Incremental Costs of REPS Compliance, Include Gross Receipts Tax And Regulatory Fee

Rule R8-67(e)(9) describes how an electric public utilities' incremental costs from REPS compliance are to be recovered from customers. PEC proposes to amend the current Rule as follows:

(9) The incremental costs to be recovered by an electric public utility in any ~~calendar year~~ 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 ~~may~~ shall be collected through fixed monthly charges, ~~energy-based amounts per kilowatt-hour, or by a combination of both.~~ 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).

Both Duke and the Public Staff support PEC's proposed elimination of the option to collect costs based on a per kilowatt-hour charge. For example, Duke argues that "the fixed monthly charge eliminates any potential for mismatches in the calculations of the amount of available annual REPS compliance dollars under the cost caps as applied to variable amounts of energy over which to distribute the available REPS dollars."

The Commission agrees that collecting REPS costs via a fixed monthly charge is superior to collecting the costs via a per-kilowatt-hour charge in that it is straight-forward, easy to administer, easy to explain to customers, and fully consistent with G.S. 62-133.8(h)(4). In its July 25, 2008 Order on Public Staff Motion to Disapprove Proposed Rider BA-1 in Docket No. E-2, Sub 930, the Commission rejected the Public Staff's proposal that PEC be required to collect REPS costs via per-kilowatt-hour charges. The Commission concluded that a per-kilowatt-hour approach would leave a utility at risk of being unable to recover its full REPS compliance costs. Therefore, the Commission will adopt PEC's proposal to eliminate the option of collecting REPS costs via a per-kilowatt-hour charge and amend Rule R8-67(e)(9) as shown in Appendix A.

PEC also proposes to set charges based on a "cost recovery period," rather than a "calendar year." The Public Staff opposes this change, arguing that establishing the cost cap (REPS spending) limitations on a calendar-year basis is more appropriate because G.S. 62-133.8 provides that REPS compliance is to be determined on a calendar-year basis.

Dominion and Duke support PEC's proposal to replace "calendar year" with "cost recovery period" in Rule R8-67(e)(9), with Duke stating:

In this way, the annual per-account cost limitations would track with the charges assessed to a utility's retail customers through one cost recovery rider period and create a clear and straight forward process for the utilities, its respective customers, and the Commission to account for the annual per-account costs recovered from customers.

Duke argues that the Public Staff's proposal would lead to confusion and administrative problems for both the utilities and the Commission. Duke states that:

[The Public Staff's] proposal would require the utilities to take into account two separate REPS cost recovery riders to measure the amount that its respective customers could be charged for REPS compliance costs on an annual basis. [Duke], for example, would have to make sure that the costs charged for the REPS rider from the previous year (which would be charged to the customer during the months of January through August of a given year) and the REPS rider for the current year (which would be

charged to the customer during the months of September through December of that year) did not exceed the per-account cost caps set forth in Senate Bill 3. Those riders reflect REPS compliance costs from different "compliance years" and allowing the rider from the previous year to dictate how much the Company could charge its customers in the next year, regardless of the actual costs incurred, clearly stifles the intent of Senate Bill 3.

Duke argues further that:

G.S. 62-133.8(h)(3) makes no mention of whether annual REPS incremental compliance costs incurred by an electric power supplier or recovered from an electric power supplier's retail customers are to be measured over the course of a calendar year or over the course of each electric power supplier's respective cost recovery period. The statute merely states that such incremental costs are "annual" and "shall not exceed an amount equal to the per-account annual charges" set forth in G.S. 62-133.8(h)(4) (emphasis supplied). Based on [Duke's] experience to date, and for the reasons set forth above, the annual period over which those costs should be measured is the utility's cost recovery period and NCUC Rule R8-67(e)(9) should be amended accordingly.

The Commission agrees with Duke that G.S. 62-133.8(h)(3) and (4) require the costs caps to be calculated on an annual (12-month) basis, but not necessarily on a calendar-year basis. In fact, no customer should be charged in excess of the annual per-account cost cap in any 12-month period. The Commission believes PEC's proposal will make it easier to track REPS cost recovery from one recovery period to the next, and will, therefore, adopt PEC's proposal to amend Rule R8-67(e)(9), by replacing "calendar year" with "cost recovery period."

Both the Public Staff and PEC propose to further amend Rule R8-67(e)(9) to include a clarification that revenues collected from customers for REPS costs shall not exceed the annual cost caps established in G.S. 62-133.8(h)(4), even when the related gross receipts tax and regulatory fee are included. Dominion supports this clarification. On the other hand, NCSEA argues that PEC's proposal would substantively change the definition of "incremental cost," and is therefore beyond the scope of this proceeding.

The REPS rider charge on a customer's bill is grossed up to reflect the gross receipts tax and regulatory fee. To avoid customer confusion, this should be the amount compared to the per-account cost cap. The Commission therefore, believes the amendment is appropriate and will provide needed certainty if electric public utilities' REPS expenditures approach the statutory cost recovery caps. The Commission will, therefore, approve the clarifying language proposed by the Public Staff and PEC, as shown in Appendix A.

#### Issue 41: Cost Caps Refer To Costs Recovered From Customers

Rule R8-67(e)(10) states in part:

Incurring costs may be recovered by an electric public utility in any year 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 total annual incremental costs incurred in that year do not exceed the per-account annual charges provided in G.S. 62-133.8(h)(4). [Emphasis added.]

The Commission believes this specific use of "incurred" is inconsistent with the intent of G.S. 62-133.8(h)(4), which focuses on the maximum amount that can be recovered from customers annually. The Commission, therefore, will replace the word "incurred" with the phrase "recovered from customers" in this Rule as shown in Appendix A.

#### Issue 42: Length Of Utility Contracts With Solar Facilities

Rule R8-67(f)(1) states:

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.

ElectriCities contends that this provision interferes with the rights of electric power suppliers and renewable energy facilities to contract on such terms as they deem appropriate, and therefore it should be deleted. The Public Staff disagrees, arguing that the Commission adopted the provision in order to implement the second sentence of G.S. 62-133.8(d), and it should be retained.

The Commission notes that the provision is essentially identical to the statute cited by the Public Staff. Therefore, the Commission will not delete the provision as proposed by ElectriCities. This provision is not intended to stifle parties' ability to negotiate mutually agreeable terms, but to give a solar developer recourse to the Commission if it believes that the electric power supplier is not willing to enter into a contract of sufficient duration to satisfy G.S. 62-133.8(d).

#### Issue 43: Metering Requirements For Renewable Energy Facilities

Commission Rule R8-67(g) addresses the metering of renewable energy facilities. ElectriCities proposes to revise subdivision (g)(1) as follows:

(1) Except as provided below, for the purpose of receiving renewable energy certificates, the electric power generated by a

renewable energy facility shall be measured by an electric meter, or effective with the implementation of the North Carolina REC Tracking System, as otherwise provided by the rules of such tracking system supplied by and read by an electric power supplier.

ElectriCities argues that it is impractical and expensive to require that a meter be "supplied by and read" by the electric power supplier since the term "electric power supplier" is defined in G.S. 62-133.8(a)(3) to include only those entities that provide service to retail electric customers in North Carolina, and many suppliers are purchasing RECs from facilities located in distant states. The Public Staff agrees with ElectriCities' proposed change.

The Commission is concerned that the specific amendment proposed by ElectriCities would empower REC tracking system administrators, rather than the Commission, to determine the appropriate metering requirements for renewable energy facilities, even those renewable energy facilities that are located in North Carolina. Therefore, the Commission will adopt a modified version of ElectriCities' proposed amendment to Rule R8-67(g)(1) as shown below and in Appendix A:

(1) Except as provided below, for the purpose of receiving renewable energy certificates, 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.

#### Issue 44: Metering Required For Renewable Energy Facilities Located Behind The Utility's Meter

ElectriCities proposes to amend Rule R8-67(g)(3) as follows:

(3) The electric power generated by a renewable energy facility ~~with a nameplate capacity of 1 MW or less interconnected behind the utility meter at a customer's location may be measured accurately by an ANSI certified electric meter not provided by an electric power supplier industry accepted metering, controls and verification system.~~ The data provided by this meter may be read and self-reported by the owner of the renewable energy facility. ~~The owner of the meter shall comply with the meter testing requirements of Rule R8-13.~~

ElectriCities argues that:

there are existing renewable energy facilities, some with nameplate capacities greater than 1 MW, that do not supply electricity to the grid (behind the meter generation), and do not exclusively use ANSI-certified meters, but still have adequate metering and verification equipment to provide auditable data to NC-RETS . . . [R]equiring only certain types of metering only adds significant additional costs . . . .

The Commission agrees with the intent of ElectriCities' proposed revisions, but believes some generators might find it helpful if the Rule retained the existing language regarding ANSI-certified meters. Therefore, the Commission will adopt ElectriCities' proposal with the minimal changes necessary to make it clear that ANSI-certified meters remain acceptable devices for measuring the output of behind-the-meter generation. Accordingly, the Commission will modify Rule R8-67(g)(3) as follows:

~~The electric power generated by a renewable energy facility with a nameplate capacity of 1MW or less interconnected behind 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 this 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 comply with the meter testing requirements of Rule R8-13.~~

#### Issue 45: Metering For Thermal Energy Facilities

The Commission observes that issues have recently arisen in some renewable energy facility registration proceedings as to the proper metering and/or estimation of energy output from thermal energy facilities, including solar thermal facilities. The Commission believes this is an appropriate time to address this matter and, therefore, will amend Rule R8-67(g)(4) as follows:

(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 measureable 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 megawatt-hour certificate for every 3,412,000 British thermal units (Btu) of useful thermal energy produced. Btu meters shall be located so as to measure the actual thermal energy consumed by the load served by the



facility. Thermal 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.

#### Issue 46: All Renewable Energy Facility Production Data Subject To Audit

ElectriCities proposes to delete R8-67(g)(5), which provides the following: "Except in those cases where the electric meter is supplied by and read by an electric power supplier, electric generation or thermal energy production data is subject to audit by the Commission, the Public Staff, or an electric power supplier." As ElectriCities points out, other provisions of the Commission's rules require a renewable energy facility to consent to auditing by the Commission and the Public Staff.

The Public Staff notes that Rule R8-67(g)(5) differs from these other provisions, however, in that it grants limited audit rights – relating only to electric generation or thermal energy production data – to the electric power supplier purchasing RECs or bundled electric energy from the facility. The Public Staff believes that this subdivision should be retained, but does not state why.

The Commission agrees with ElectriCities. Regardless of what entity is reading the meter of a renewable energy facility, that facility's production data should be subject to audit by the Commission and the Public Staff. The Commission, therefore, will delete R8-67(g)(5).

#### Amendments to New Rule R8-67(h), Renewable Energy Certificate Tracking System

On January 27, 2010, the Commission issued an Order Proposing Rules and Requesting Comments in Docket No. E-100, Subs 113 and 121. The Commission requested comments on the proposed new Rule R8-67(h), Renewable Energy Certificate Tracking System:

##### (h) Renewable Energy Certificate Tracking System

(1) Each electric power supplier shall participate in the REC tracking system established by the Commission and shall provide REPS compliance data to the system, which data may be audited by the Public Staff and the Commission to verify REPS compliance. Municipalities and electric membership corporations may elect to have their compliance data reported by a third party.

(2) Each renewable energy facility and new renewable energy facility shall participate in a REC tracking system and facilitate the transfer of production data to such tracking system for the creation, tracking, and retirement of RECs. Multi-fuel facilities shall calculate on a monthly basis the percentage of their energy output that is attributable to qualifying fuels.

Such facilities shall retain documentation verifying those calculations for audit by the Public Staff. Multi-fuel facilities shall monthly provide the results of the calculations to the REC tracking system. The REC tracking system shall create appropriate RECs only for the qualifying portion of the multi-fuel facility's energy output.

(3) Each balancing area operator shall provide, at least monthly, electric generation production data to the REC tracking system 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.

(4) Each electric power supplier that has renewable energy facilities and new renewable energy facilities interconnected with its electric distribution system, and that routinely reads the electric generation production meters for those facilities, shall provide, at least monthly, the facilities' production data to the REC tracking system. Such electric power supplier shall retain documentation verifying the production data for audit by the Public Staff.

(5) A renewable energy facility or new renewable energy facility that produces thermal energy that qualifies for RECs shall self-report to the REC tracking system the facility's qualifying thermal output at least once a year. Such facilities shall retain documentation verifying the production data for audit by the Public Staff.

(6) A renewable energy facility or new renewable energy facility that self-reports its production data pursuant to Commission Rule R8-67(g)(3) shall self-report its output to the REC tracking system at least once a year. Such facilities shall retain documentation verifying the production data for audit by the Public Staff.

(7) The owner of an inverter-based solar photovoltaic system with a nameplate capacity of 10 kW or less may estimate its output using generally accepted analytical tools pursuant to Commission Rule R8-67(g)(2). Such a facility shall self-report its output to the REC tracking system at least once a year. Such facilities shall retain documentation verifying their production data for audit by the Public Staff.

(8) All energy production and fuel data provided to the tracking system, including underlying calculations and estimates, shall be retained by the facility's owner and made available to the Public Staff for audit for at least ten (10) years.

(9) Each electric power supplier that complies with REPS by implementing energy efficiency and/or demand-side management programs shall use the REC tracking system to track the forecasted and verified energy savings of those programs.

(10) Each participant in the REC tracking system established by the Commission shall pay the REC tracking system administrator for REC tracking system services according to the following fee schedule:

- a. \$0.01 for each REC exported to an account residing in a different REC tracking system.
- b. \$0.01 for each REC retired for reasons other than compliance with North Carolina's REPS.
- c. All other Commission-approved costs of developing and operating the REC tracking system shall be allocated among all electric power suppliers based upon their relative megawatt-hours of electricity sales in North Carolina in the previous calendar year.

#### Issue 47: RECs Must Be Tracked In NC-RETS

ElectriCities proposes to add language to Rule R8-67(d)(1) specifying that RECs, "effective with the implementation of the North Carolina REC Tracking System, must have been registered on such tracking system." The Public Staff agrees with ElectriCities' wording as far as it goes, but argues that it does not go far enough because it could be interpreted to mean that RECs already in existence at the implementation of NC-RETS do not have to be registered on the system. The intention of the NC-RETS Stakeholder Group, in which the Public Staff participated, was that once NC-RETS becomes operational, all RECs, even those already in existence, must be entered into the system in order to be used for REPS compliance.

The Public Staff proposes new language for subdivision (1), which reads in part: "Only RECs created by or imported into NC-RETS are eligible RECs under G.S. 62-133.8(b)(2)e. or G.S. 62-133.8(c)(2)d." The Public Staff believes that this language is a more accurate statement of the Stakeholder Group's intent than ElectriCities' proposal, and consequently ElectriCities' language should not be adopted.

The Commission agrees with the Public Staff's analysis, and will, therefore, adopt a slightly modified version of the Public Staff's proposed language as set forth in Appendix A in the new Rule R8-67(h)(2) clarifying that only RECs issued by or imported into NC-RETS are qualifying RECs under G.S. 62-133.8.

#### Issue 48: The Public Staff's Proposed Amendments To New Rule R8-67(h)

The Public Staff proposed amendments to the Commission's proposed new Rule R8-67(h), stating the intent of the amendments to be to:

- a. Establish NC-RETS and give a third-party vendor selected by the Commission authority to administer the system.
- b. Make it clear that only RECs created in or imported into NC-RETS are eligible for meeting REPS compliance.

- c. Change the phrase "the REC tracking system" and similar phrases with the name of the system, "NC-RETS."
- d. Clarify what a "multi-fuel facility" is and how the energy output of those facilities would be calculated and reported.
- e. Change the phrase "production data" to "energy output" so that the phrase is consistent throughout the rule.
- f. Clarify who is responsible for reporting meter readings for renewable energy facilities.
- g. Consolidate record retention provisions into one subdivision.
- h. Make other drafting technical changes.

The Commission appreciates the Public Staff's careful critique of the proposed Rules and will adopt most of its suggestions. However, the Commission believes that some of the Public Staff's specific revisions are potentially problematic. For example, the Public Staff proposes to revise Rule R8-67(h)(1) to give the NC-RETS Administrator authority to "prescribe the specific types of and manner in which information shall be reported to NC-RETS." The Commission is concerned that this delegation of authority is too broad – that the NC-RETS Administrator would be authorized to essentially define what constitutes a valid REC. In late-filed comments, CPI expressed similar concerns. The Commission believes it should retain for itself that responsibility, relying on Senate Bill 3 for guidance and implementing it via its rules and orders, with input from parties and the NC-RETS Stakeholder Group.

The Public Staff's proposed revision of Rule R8-67(h)(3) would require renewable energy facilities to participate in NC-RETS, apparently to the exclusion of other state and regional tracking systems. This is inconsistent with the Commission's many orders accepting registration of renewable energy facilities and new renewable energy facilities. For facilities located outside of North Carolina, the Commission's registration orders typically state: "To the extent that [facility owner] is not otherwise participating in a REC tracking system, it will be required to participate in the North Carolina REC tracking system in order to facilitate the issuance of RECs."<sup>11</sup>

In addition, it is possible for a renewable energy facility to be located in North Carolina and interconnected with Dominion's transmission system. Since PJM operates Dominion's transmission system and acts as its balancing authority, those facilities are already required to participate in PJM's Generation Attribute Tracking System. The Commission sees no advantage to forcing such facilities to participate in NC-RETS.

The Public Staff's proposed consolidation of Rule R8-67(h) subdivisions (3) and (4) appears to be based on the assumption that balancing area operators (Duke and PEC) literally read the energy output meters for all generating facilities interconnected to the transmission system. It is the Commission's understanding that this is not always the case. Rather, balancing area operators compile generator output data from a variety of sources and reconcile it monthly against the energy used by load-serving electric utilities.

---

<sup>11</sup> See, for example, the Commission's March 31, 2010 Order in Docket No. EMP-31, Sub 0.

Thus, because of these concerns, the Commission will adopt most, but not all, of the Public Staff's proposed revisions, as shown in Appendix A.

#### Issue 49: Aggregated Compliance To Be Allowed

GreenCo offers several revisions throughout Rule R8-67(h) to clarify that the Commission will allow electric power suppliers to consolidate their REPS compliance data and to report that data as a group, as well as via a utility compliance aggregator. The Commission finds those revisions to be consistent with the waivers it has granted in order to facilitate aggregated compliance efforts, and will, therefore, accept GreenCo's proposed revisions as shown in Appendix A.

#### Issue 50: Utility Compliance Aggregators May Report Meter Readings To NC-RETS

GreenCo and ElectriCities propose an amendment to Rule R8-67(h) that would allow a third party to report (and/or retain) distribution-level renewable energy facility meter readings to NC-RETS on behalf of an electric power supplier. They state that such revisions are consistent with waivers granted by the Commission to allow the Power Agencies and GreenCo to file consolidated REPS compliance plans and REPS compliance reports on behalf of their respective members. GreenCo argues that the proposed amendment would "afford GreenCo the opportunity to perform the role for which it was formed by its members and to allow those members to forego unnecessary expense and administrative burden." Similarly, ElectriCities states:

A requirement that the Power Agencies' municipal members must establish their own individual accounts in NC-RETS, individually report such production data information, and individually maintain records of such production data information, creates unnecessary and burdensome administrative duties for the municipal members that are duplicative of duties that the Power Agencies have agreed to undertake on their behalf.

The Commission appreciates the many efforts by the Power Agencies and GreenCo to assist their members to comply with Senate Bill 3 as efficiently as possible. The Commission believes it may be more efficient to allow utility compliance aggregators to report meter readings to NC-RETS on behalf of their members. However, the Commission understands that the renewable energy facility meter reads at issue here will be used to create RECs. Those RECs will have a financial value to the generators and a compliance value to the electric power suppliers that acquire them. Such meter reads can be the source of disputes, and it is important that such disputes be resolved quickly and in a manner that assures the credibility of RECs issued by NC-RETS. The Commission is concerned that allowing member electric power suppliers to shift responsibility for reporting their metering data to the Power Agencies or GreenCo will result in delays, either in reporting the data initially or resolving meter data disputes. In addition, the Public Staff presumably will want to audit a sample of RECs, which would require it to trace each REC in a sample back to the original metering data

from which the REC emanated. It is possible that allowing utility compliance aggregators such as the Power Agencies and GreenCo to retain the metering data on behalf of their members could hamper such audit activities. Therefore, while the Commission will approve the revisions proposed by GreenCo and the Power Agencies, the Commission requests the Public Staff's assistance in monitoring these two issues. The Commission will, therefore, adopt the following language in Rule R8-67(h)(6), as shown in Appendix A: "Municipalities and electric membership corporations may elect to have the [renewable energy] facilities' production data reported to NC-RETS and retained for audit by a utility compliance aggregator."

**Issue 51: Electric Power Suppliers Must Use NC-RETS To Calculate Their REPS Obligations, Including NC-RETS Charges**

ElectriCities proposes to amend the Commission's proposed Rule R8-67(h) by specifying that electric power suppliers' data submissions to NC-RETS shall be made "contemporaneously with the filing of its REPS Compliance Report" and that the "compliance information required should be no more than that information required in the REPS Compliance Report." The Commission agrees with ElectriCities' revisions from the perspective of using NC-RETS to demonstrate compliance with Senate Bill 3. However, NC-RETS will require additional information from electric power suppliers in order to generate the billings by which the NC-RETS Administrator will be paid. Therefore, the Commission will accept ElectriCities' proposed revisions, but will modify them as necessary to assure the NC-RETS Administrator can generate monthly bills. Specifically, the Commission will amend Rule R8-67(h)(11) as shown in Appendix A to state that each electric power supplier, or its utility compliance aggregator, shall, within 60 days of NC-RETS beginning operations, and by May 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.

**Issue 52: Utility Compliance Aggregator May Report EE/DSM Savings In NC-RETS For Municipal Power Suppliers Or Electric Membership Corporations**

ElectriCities proposes that subsection (9) of proposed Rule R8-67(h) be modified to allow municipalities and electric membership corporations to elect to have their forecasted and verified energy savings from their energy efficiency and/or demand-side management programs reported to NC-RETS by their agents, presumably their "utility compliance aggregators," and to have their reported savings consolidated with the reported savings of other municipalities or electric membership corporations, as shown below:

Each electric power supplier that complies with REPS by implementing energy efficiency and/or demand-side management programs shall use the REC tracking system to track the forecasted and verified energy savings of those programs. Municipalities and electric membership corporations may elect to have their forecasted and verified energy

savings from their energy efficiency and/or demand-side management programs reported to the REC tracking system by a third party, and to have their reported savings consolidated with the reported savings from other municipalities or electric membership corporations, as applicable.

GreenCo supports ElectriCities' proposal, but suggests slight modifications to accommodate aggregated reporting of DSM/EE savings via an agent. The Commission finds ElectriCities' proposal and GreenCo's additions to be reasonable and consistent with the waivers it has granted the Power Agencies and GreenCo. However, the Commission believes it is appropriate to specify that a "utility compliance aggregator," rather than a "third party," may report the EE and/or DSM information on behalf of a municipality or EMC. The Commission will, therefore, adopt a slightly different version of the amendment as Rule R8-67(h)(10), as shown in Appendix A.

#### Issue 53: NC-RETS Costs To Be Considered Incremental REPS Costs

G.S. 62-133.8(h)(1) allows electric power suppliers to recover the "incremental costs" of REPS compliance from their customers, and G.S. 62-133.8(h)(4) establishes specific maximum per-account annual charges via which electric power suppliers can recover their REPS "incremental costs." G.S. 62-133.8(h)(3) provides that "An electric power supplier shall be conclusively deemed to be in compliance with the requirements of subsections (b), (c), (d), (e), and (f) of this section 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)..."

ElectriCities proposes additional language in Rule R8-67(h) such that "all costs paid by an electric power supplier for REC tracking system services shall be deemed to be incremental costs pursuant to G.S. 62-133.8(h)(1)." GreenCo supports ElectriCities' proposal.

Duke, Dominion, and PEC agree in concept, and offer slightly different language for Rule R8-67(h):

All reasonable and prudent costs incurred by the electric power supplier to comply with NC-RETS rules are recoverable pursuant to G.S. 62-133.8(h) and in a manner consistent with Rule R8-67(e). All costs required to develop and operate a REC tracking system which are allocated to electric power suppliers by the Commission, shall be considered reasonable and prudent incremental costs and shall be recovered through each electric power supplier's annual rider established pursuant to G.S. 62-133.8(h) and Commission Rule R8-67(e).

The Commission generally agrees with the proposed revisions to Rule R8-67(h), but notes that it is possible for an electric power supplier to incur NC-RETS charges that are unrelated to REPS compliance, and hence inappropriate to apply toward the maximum annual customer charges in G.S. 62-133.8(h)(4). For example, an electric

power supplier would incur additional NC-RETS charges if it exported RECs to another tracking system (presumably to effectuate a REC sale) or if it voluntarily retired RECs for reasons other than REPS compliance. Those NC-RETS charges would not fit the definition of "incremental costs" in G.S. 62-133.8(h)(1) and could not be included in the annual customer charges specified in G.S. 62-133.8(h)(4). The Commission will, therefore, clarify the Rule to better address NC-RETS billings to electric power suppliers and cost recovery of same with the following language in Rule R8-67(h)(11), as shown 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 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 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, pursuant to G.S. 62-133.8(h).

#### Issue 54: Multi-Fuel Renewable Energy Facilities

ElectriCities offered revisions to Rule R8-67(h) regarding metering data for multi-fuel facilities that appear to be intended to simply clarify the provision. CPI suggests that the Commission clarify "that multi-fuel facilities that utilize more than one renewable energy resource must provide the percentage calculations for each type of renewable fuel." The Commission agrees with CPI's suggestion and notes that such specificity will be especially important for facilities that use swine or poultry waste and other renewable fuel in order to assure NC-RETS issues the appropriate number of RECs that are eligible to count toward the specific provisions of Senate Bill 3 regarding the poultry waste and swine waste carve outs. The Commission's revisions to Rule R8-67(h)(4), as shown below and in Appendix A, accommodate suggestions by ElectriCities, CPI, and the Public Staff, recognizing that some of their suggestions are at cross purposes:

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.



## Issue 55: NC-RETS Fees

Proposed Rule R8-67(h)(10) states as follows

(10) Each participant in the REC tracking system established by the Commission shall pay the REC tracking system administrator for REC tracking system services according to the following fee schedule:

- a. \$0.01 for each REC exported to an account residing in a different REC tracking system.
- b. \$0.01 for each REC retired for reasons other than compliance with North Carolina's REPS.
- c. All other Commission-approved costs of developing and operating the REC tracking system shall be allocated among all electric power suppliers based upon their relative megawatt-hours of electricity sales in North Carolina in the previous calendar year.

ElectriCities proposes to amend proposed Rule R8-67(h)(10) so that the transaction fees for (1) exporting a REC to another tracking system or (2) retiring a REC for reasons other than REPS compliance would not apply to electric power suppliers. ElectriCities argues that since North Carolina electric power suppliers are responsible for all NC-RETS costs, "additional fees by an electric power supplier . . . is unnecessary."

The Commission disagrees. The fees cited by ElectriCities are for transactions unrelated to REPS compliance that would be voluntary for ElectriCities and/or its members. The billing and administration related to these transactions will require attention by the NC-RETS Administrator. The Commission believes that it is appropriate that NC-RETS account holders, including electric power suppliers, performing such transactions absorb such costs. Therefore, the Commission will retain the fees in the Rule as set forth in Rule R8-67(h)(12) of Appendix A.

PEC, Duke, and Dominion argue that it is

unfair that the electric power suppliers and their ratepayers should have to bear the cost of the system when others (aggregators, brokers, etc.) may utilize NC-RETS at no cost. Therefore, the Utilities request that a registration fee of some amount be assessed to all users of the system. In addition, all fees collected from NC-RETS participants should be used to offset the overall cost associated with operating the NC-RETS.

On the surface, the utilities' assertions are correct. The Commission's proposed fee structure allows any entity to establish an account in NC-RETS, and they can transfer RECs into that account and never accrue an NC-RETS fee. However, there are only three potential final dispositions for those RECs. An account holder that exports RECs to another tracking system or retires RECs for voluntary compliance will incur a

fee from NC-RETS. If the RECs are transferred to a North Carolina electric power supplier and that entity uses the RECs for REPS compliance, no charge will be incurred for the transfer under the rationale that the REC purchaser, here the electric power supplier, has already paid its "load ratio share" of NC-RETS costs, and any additional transfer fees paid by the seller would be passed on to the electric power supplier and embedded in the REC price.

The Commission believes its proposed pricing structure, as shown in Rule R8-67(h)(11) and (12), is sound and fair and will retain it. However, the Commission will require the NC-RETS Administrator to provide data at the end of 2011 indicating the number of accounts and the number of RECs associated with them that can be attributed to REC aggregators and brokers, relative to all NC-RETS account holders and all RECs in NC-RETS.

Finally, the Commission notes that it has structured its Agreement with the NC-RETS Administrator such that fees collected in excess of the monthly fees from electric power suppliers shall be used, as available, to offset the cost of system enhancements that are recommended by the NC-RETS Stakeholder Group and approved by the Commission.

#### Issue 56: Extended Comment Period

ElectriCities suggests (and GreenCo agrees) that the Commission "consider extending the comment period . . . until the vendor selected by the Commission . . . has had sufficient time to consider and discuss with the NC-RETS Stakeholder Group and Commission Staff its suggestions for the structure and operation of NC-RETS."

The Commission appreciates ElectriCities' suggestion, which appears intended to ensure NC-RETS is as efficient as possible, but notes that since NC-RETS is now operational, such a suggestion is moot.

#### Issue 57: Accurate Meter Data, Timing Of Meter Data Uploads Into NC-RETS

CPI reiterates the need for accurate meter data, which the Commission believes is addressed by revised Rule R8-67(g), as discussed in Issues 43, 44, and 45 this Order. CPI agrees with the Public Staff's suggestion that, for purposes of REC issuances, the phrase "production data" should be replaced with "energy output" for consistency. The phrase "energy output" is more precise. Therefore, the Commission will adopt the Public Staff's proposed phrasing throughout Rule R8-67(h) as shown in Appendix A.

CPI requests that monthly meter reports not be required any sooner than the 15<sup>th</sup> day of the following month. The Commission notes there is no deadline for facilities that are allowed to self-report their energy output pursuant to Rule R8-67(g). The NC-RETS Interim Operating Procedures require that electric power suppliers and balancing area operators provide metering data within 30 days to NC-RETS. The Commission finds

that there is no reason to modify the Rule as suggested by CPI. Therefore, the Commission declines to adopt CPI's proposal.

#### Issue 58: Qualifying Thermal Output, Definition Of Useful Thermal Energy

CPI agrees with the suggestion of the Public Staff that the term "qualifying thermal output" as used in proposed Rule R8-67(h)(5) be replaced with "qualifying thermal energy output." Furthermore CPI suggests that "qualifying thermal energy output" be specified as "useful thermal energy output." This term is used by the Federal Energy Regulatory Commission (FERC) in its definition of a "qualifying facility." The FERC rules define "useful thermal energy" as:

. . . the 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). 18 C.F.R. § 292.202(h).

The Commission believes CPI's proposed use of and definition of "useful thermal energy output" is appropriate and will incorporate it into the Rule at this time as shown in Rule R8-67(h)(1)(iv) and R8-67(h)(7) in Appendix A.

#### Issue 59: Renewable Energy Facility NC-RETS Fees

CPI requests clarification as to whether renewable energy facilities would be considered "participants" in NC-RETS, and hence subject to the proposed fees for exporting RECs to another tracking system or retiring RECs for reasons other than REPS compliance. The Commission's intent is that the term "participant" includes any entity or person that establishes an account in NC-RETS, so it does include the owners of renewable energy facilities, and such account holders would be subject to the two fees cited by CPI. The Commission notes, however, that owners of renewable energy facilities will not be charged fees for 1) establishing an account in NC-RETS; 2) having RECs issued into its account based on meter data or qualifying estimates; 3) transferring RECs to another NC-RETS account holder such as an electric power supplier; or 4) advertising its RECs for sale on NC-RETS. The Commission believes that the proposed fee schedule appropriately minimizes NC-RETS charges for owners of renewable energy facilities. Simultaneously, it protects the State's electric ratepayers from subsidizing NC-RETS transactions that are unrelated to REPS compliance.

#### Issue 60: Data Retention

QVC expresses concern with the 10-year data retention requirements in proposed Rule R8-67(h)(8). QVC asserts that, since "an electric power supplier with a new renewable energy facility interconnected with its electric distribution system which routinely reads the production meter must provide the production data to the tracking

system, it would appear that the energy production data . . . would be held [retained] by the electric power supplier and not the facility's owner." The Commission agrees with QVC and will amend Rule R8-67(h)(6) as shown in Appendix A to clarify that the requirement to retain meter data accrues to the electric power supplier that reads the meter. However, there are other data retention requirements that must accrue to the facility owner, such as documentation of various fuels used when some of the fuels qualify for RECs and others do not. Therefore, the Commission will clarify in Rule R8-67(h)(9) as shown in Appendix A that 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.

Further, QVC asserts that electric power suppliers should be required to provide the facility with copies of production data. The Commission is of the opinion that this is not necessary because NC-RETS will notify a facility owner when a meter reading has been submitted to NC-RETS for the owner's facility. The owner will have the options of (1) immediately accepting the meter read, which will initiate REC issuance; (2) disputing the meter read within 14 days; or (3) doing nothing, which will cause its RECs to issue in 14 days. In any case, all meter read data entered into NC-RETS will be retained in NC-RETS.

QVC suggests that the Rule should be revised to allow data to be retained electronically. The Commission finds this suggestion to be reasonable and will adopt it as shown in Rule R8-67(h)(14) in Appendix A.

#### Issue 61: EE And DSM Tracking In NC-RETS

The Commission's proposed REC tracking system Rule R8-67(h)(9) includes the following provision regarding EE and DSM:

Each electric power supplier that complies with REPS by implementing energy efficiency and/or demand-side management programs shall use the REC tracking system to track the forecasted and verified energy savings of those programs.

PEC, Dominion, and Duke suggest revising this language to clarify that EE may not be the sole source of compliance credits and to simplify reporting of EE in the tracking system. They state that NC-RETS is not an appropriate mechanism for forecasting EE program savings. Rather, NC-RETS is a system for reporting EE savings claimed for REPS compliance. They assert that EE savings will be verified through the EE program measurement and verification (M&V) process. EE savings reported in NC-RETS will be corrected, if needed, after the M&V process is completed. However, that process is a function of EE program management rather than NC-RETS tracking.

Accordingly, the three electric public utilities suggest revising Rule R8-67(h)(9) as follows:

(9) Each electric power supplier that uses energy savings resulting from energy efficiency and/or demand-side management programs to meet its REPS requirements ~~complies with REPS by implementing energy efficiency and/or demand-side management programs~~ shall use the REC tracking system to ~~track~~ report the ~~forecasted and verified~~ energy savings of those programs.

The Commission believes the revisions proposed by PEC, Dominion, and Duke are appropriate clarifications, and will, therefore, adopt them. In addition, the Commission will modify this provision to accommodate utility compliance aggregators and to require that records regarding EE and DSM program achievements be retained for audit. In sum, new Rule R8-67(h)(10) reads as follows and as shown in Appendix A:

(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 aggregated 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.

#### Issue 62: Definitions

NCSEA suggests the Commission's Rule regarding the REC tracking system would benefit from the addition of definitions for the terms "multi-fuel facility," "qualified fuel," "qualifying portion," "balancing area operator," "participant," and "REPS compliance data." The Commission agrees and will amend the Rule to include definitions for those terms that are used in Rule R8-67(h), as shown in Appendix A. (Since some of the terms have been eliminated, it is not necessary for the Rule to include definitions for all of them.)

#### Issue 63: Electric Power Supplier To Provide Meter Reads For Facilities That It Owns

NCSEA seeks clarification of proposed Rule R8-67(h)(4) that electric power suppliers that read meters for renewable energy facilities that are interconnected with the power supplier's distribution system should provide those meter reads to the REC

tracking system even if the facilities are owned by the electric power supplier. The Commission finds this clarification to be unnecessary, and will decline to adopt NCSEA's proposal.

NCSEA further states that it is unclear what is meant by "routinely reads the electric generation production meters," and suggests deleting "routinely." The Commission agrees with NCSEA that the qualifier "routinely" is potentially problematic and will, therefore, delete it from Rule R8-67(h)(6) as shown in Appendix A.

#### Issue 64: NC-RETS Charges Allocated To Electric Power Suppliers

NCSEA suggests that the very last provision of the proposed Rule R8-67(h)(10)(c) regarding allocating the tracking system's costs should be re-stated as a stand-alone subsection. The Commission agrees and has, therefore, modified the Rule such that Rule R8-67(h)(11), as shown in Appendix A, addresses the allocation of NC-RETS costs.

In addition, NCSEA proposes to add the following sentence to that subsection:

Each electric power supplier shall pay its share of such costs to the REC tracking system administrator on or before [date] of the following year.

The Commission believes this proposal would authorize electric power suppliers to pay their tracking system costs via one payment a year. Since this is contrary to the Commission's agreement with the NC-RETS Administrator, the Commission will not adopt NCSEA's proposed new language.<sup>12</sup>

#### Issue 65: NC-RETS Stakeholder Group, Changes To NC-RETS

NCSEA suggests that the proposed rule be amended to provide for (1) a stakeholder process, and (2) management of tracking system changes. The Commission established a Stakeholder Group on September 4, 2008, when it issued its first Order in Docket No. E-100, Sub 121. The Stakeholder Group has provided valuable assistance in defining the tracking system's functional requirements, drafting the RFP, reviewing vendor proposals, and beta testing the system itself. The Commission believes the Stakeholder Group can continue to provide an efficient forum for educating users and proposing system changes for Commission consideration. The Commission finds that it is appropriate to include these concepts in the Rule and, therefore, adopts them in revised Rule R8-67(h)(13) as shown in Appendix A.

#### Issue 66: Costs To Collect And Transfer Meter Data

NCSEA observes that the proposed Rule fails to address the costs electric public utilities will incur to "collect meter data and transfer that data into the tracking system."

---

<sup>12</sup> Details regarding the NC-RETS Administrator's billing procedures can be found in the NC-RETS Interim Operating Procedures, which were issued July 1, 2010, in Docket No. E-100, Sub 121.

Since the utilities themselves have not expressed this concern, the Commission will not address this issue at this time, believing that once all participants in the tracking system have established the required work practices the subject costs will most likely be immaterial.

#### **Issue 67: Public Information On NC-RETS**

NCSEA asserts that proposed rule R8-67(h) does not address the public information aspects of NC-RETS. The Commission notes that the Interim NC-RETS Operating Procedures issued in Docket No. E-100, Sub 121 lists in Section 9 the following "Public Reports" that will be accessible to the general public via the public pages of the NC-RETS website as follows:

- 1) Directory of Account Holders.
- 2) Directory of NC-RETS Projects [renewable energy facilities] by Fuel Type.
- 3) Annual Report of RECs issued by year, starting with 2008.
- 4) Annual Report of energy efficiency certificates issued by year, starting with 2008.
- 5) A Public Utility Compliance Report for each utility or utility group.
- 6) Imported Facilities Report listing out-of-state facilities whose RECs have been imported into NC-RETS.
- 7) Bulletin Board, which shows RECs that are available for purchase.

This list was developed by the Stakeholder Group, with some additions suggested by the NC-RETS Administrator in order to facilitate importing RECs that were issued in other tracking systems. The Commission believes the list of public reports is robust and will provide the public and REC sellers with much useful information. Even so, the Commission is open to specific Stakeholder Group proposals for making additional information available to the public via NC-RETS in the future. The Commission believes it is not necessary to address this issue in the Rule.

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

##### **Issue 68: Electric Membership Corporations Included In Definition Of Consideration**

Rule R8-68(b)(2) contains a definition of "consideration," to which the Public Staff recommends a revision. This revision is intended to clarify that the definition applies to electric membership corporations as well as electric public utilities. Dominion supports the Public Staff's proposed revision, which reads as follows:

- (2) "Consideration" means anything of economic value paid, given or offered to any person by any 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.

The Commission agrees with the Public Staff that the definition of "consideration" was never intended to exclude electric membership corporations. Therefore, the Commission will adopt the Public Staff's unopposed proposed amendment.

#### Issue 69: Duke's Proposed Definition Of Net Lost Revenues

Rule R8-68(b)(5) provides the following definition of "net lost revenues":

(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.

Duke recommends altering this definition of net lost revenues "to significantly streamline future applications for cost recovery for new energy efficiency and demand-side management measures and programs." Specifically, Duke proposes that net lost revenue recovery be limited to 36 months from the vintage year of installation of the measure, and that the provision that offsets recovery of net lost revenues by any increases in revenues be eliminated. Accordingly, Duke's proposal is as follows:

(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. Net lost revenues resulting from a new demand-side management or energy efficiency measure shall only be recoverable for up to thirty-six (36) months from the vintage year of the installation of the measure. The recovery of net lost revenue will end upon the implementation of new rates in a general rate case or comparable proceeding to the extent that rates set in a rate case or comparable proceeding are set to explicitly or implicitly recover those net lost revenues.

Dominion supports Duke's proposal. Duke first contends that its proposed alteration of Rule R8-68(b)(5) is consistent with the Agreement and Stipulation of Settlement between PEC, the Public Staff, and Wal-Mart (the PEC Agreement), approved by the Commission in its June 15, 2009 Order Approving Agreement and Stipulation of Settlement, Subject to Certain Commission-Required Modifications, in Docket No. E-2, Sub 931, and the Agreement and Joint Stipulation of Settlement (SAW Agreement<sup>13</sup>), which the Commission approved in its February 9, 2010 Order Approving Agreement and Joint Stipulation of Settlement Subject to Certain Commission-Required Modifications and Decisions on Contested Issues, in Docket No. E-7, Sub 831. Duke further contends that its proposal will streamline administration of Rule R8-68 by eliminating the need for "lengthy and contested proceedings over what constitutes 'found' revenues in favor of a bright-line test, whereby recovery is limited to 36 months."

The Public Staff disagrees with Duke's characterization of the provisions governing net lost revenue recovery in both agreements, and objects to Duke's proposed amendment on several grounds. The Public Staff states that the Commission's Order initiating this proceeding requested "specific amendments to these procedural rules that would streamline the Commission's administration of G.S. 62-133.8 and G.S. 62-133.9." The Commission admonished parties again by Order issued on February 4, 2010 that its "intent in issuing its September 4, 2009 Order was to solicit non-controversial proposals to modify the rules to streamline the Commission's administration of Senate Bill 3 or to conform the rules to Commission practice after having gained some experience with the current rules and not to solicit substantive changes . . . ." Duke sought clarification and reconsideration of the Commission's Order approving the SAW Agreement in Docket No. E-7, Sub 831. Specifically, Duke sought clarification of the language in the SAW Agreement regarding the limits on its recovery of net lost revenues. The language questioned by Duke in that proceeding is substantially similar to the language it seeks to eliminate in Rule R8-68(b)(5) in this proceeding. The Public Staff argues that, since this issue is in dispute in another pending docket, it cannot be described as "non-controversial" here.

The Public Staff also disagrees with Duke's argument that its proposal will harmonize Rule R8-68(b)(5) with the PEC Agreement and the SAW Agreement. The Public Staff states that Duke's proposed amendment to Rule R8-68 is inconsistent with

---

<sup>13</sup> On June 12, 2009, Duke, the Environmental Defense Fund, the Natural Resources Defense Council, the Southern Alliance for Clean Energy, the Southern Environmental Law Center, and the Public Staff filed an Agreement and Joint Stipulation of Settlement (SAW Agreement) in Docket No. E-7, Sub 831.

the provisions of both Agreements, and it effectively eliminates one of their material terms. Duke contends that its proposed limited recovery period “inherently takes into account the possibility of any increase in revenues resulting from any activity by the utility that causes customers to increase demand or energy consumption.” Both the PEC and SAW Agreements, however, contain explicit limitations on the recovery of net lost revenues, according to the Public Staff.

The Commission recently addressed this matter in Docket No. E-7, Sub 831. In the Order Denying Motion for Clarification and Reconsideration issued on July 7, 2010, the Commission ruled against Duke and, in effect, reaffirmed the provisions of Rule R8-68(b)(5). Accordingly, the Commission finds good cause to deny Duke’s proposal in this Docket. In so ruling, the Commission reaffirms the decision set forth in the July 7, 2010 Order in Docket No. E-7, Sub 831, and hereby incorporates that reasoning by reference. In addition, the comments filed by the Public Staff in this proceeding support the decision to deny Duke’s proposal.

#### Issue 70: PEC’s Proposed Definition Of Net Lost Revenues

PEC recommends a different amendment to the definition of “net lost revenues” in R8-68(b)(5), suggesting that, “Costs and revenues recognized or collected in an *annual rider proceeding may be appropriately excluded from this calculation*” be added to the end of that subdivision. PEC contends that this change will clarify that, because of the true-up, avoided annual rider costs will always result in a matching reduction in annual rider revenue. Therefore, according to PEC, these items may be excluded from the calculation without impacting the result. Dominion supports PEC’s proposed amendment. NCSEA argues that PEC’s proposal is a substantive change and hence beyond the scope of this proceeding.

The Public Staff asserts that PEC’s proposed change is unnecessary, and recommends that the definition of “net lost revenues” remain unchanged. The situation addressed by PEC’s proposal arose as part of a specific PEC cost recovery proceeding and, in the Public Staff’s opinion, does not rise to the level of concern necessary to justify explicit consideration in the Commission’s rules. If, however, the Commission disagrees with the Public Staff’s recommendation, the Public Staff suggests a sentence be added at the conclusion of Rule R8-68(b)(5) as shown below:

(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. Costs and revenues that are subject to true-up against each other in another

Commission proceeding may be excluded from this calculation if the exclusion is found appropriate by the Commission.

The Commission agrees with the Public Staff that the rule change proposed by PEC is not necessary. Therefore, the Commission will decline to adopt PEC's proposal or the Public Staff's alternative, leaving the definition of "net lost revenues" unchanged.

#### Issue 71: Definition Of Vintage Year

Duke proposes to add a new definition, Rule R8-68(b)(10), as follows:

"Vintage year" means the identified twelve (12) month period in which a specific demand-side management or energy efficiency measure or program is installed for an individual participant or group of participants.

The Commission believes that this definition is not needed and notes that in Docket No. E-7, Sub 831 (Petition for Approval of Save-a-Watt Approach, Energy Efficiency Rider and Portfolio of Energy Efficiency Programs), the first vintage year is 18 months, rather than 12 months, in length. Therefore, the Commission will decline to adopt Duke's proposed definition.

#### Issue 72: Filing Requirements For EE And DSM Program Applications

Rule R8-68(c)(2) specifies the filing requirements for new energy efficiency and demand-side management program applications. PEC proposes a substantial reorganization of the filing requirements under Rule R8-68(c)(2) and (3) for seeking approval of an energy efficiency or demand-side management program or measure. According to PEC, it aims to consolidate certain similar requirements and prevent duplication of others.

The Public Staff agrees with PEC's goal; however, the Public Staff notes that Rule R8-68 is designed to apply to both electric public utilities and to electric membership corporations (EMCs). While EMCs must file for approval of demand-side management and energy efficiency programs and measures, they do not file for approval to recover their costs or any incentives for those programs and measures under Rule R8-69, which sets forth the annual rider proceedings, as electric public utilities do. Consequently, Rule R8-68(c)(3) sets forth more detailed filing requirements that apply to electric public utilities only. While the Public Staff believes that some consolidation is advisable and that some duplication can be remedied, it cautions that these additional filing requirements should generally remain distinct from the EMCs' filing requirements and should not be consolidated at this time.

PEC initially suggested a rewrite of R8-68(c)(2) that lists the requirements for an energy efficiency or demand-side management program application. NCEMC and the Public Staff expressed concern that PEC's rewrite inadvertently would have caused certain provisions to apply to EMCs that do not apply to them today. In its reply

comments, PEC proposed a second revision. NCEMC states that PEC allowed them to review this second version, which NCEMC supports. Dominion also supports PEC's efforts to streamline the filing requirements in Rule R8-68(c)(2)-(3). The Public Staff recommends striking subparagraph (c)(2)(i)(f) of PEC's second version, which requests "the duration of the proposed measure or program," because it is completely redundant with (c)(2)(ii)(b).

The Commission believes PEC's second re-write, as amended by the Public Staff, helps clarify the rules and will therefore adopt the proposed revisions as detailed below and in Appendix A:<sup>14</sup>

(c)(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 and the related cost for each program year to be used with the measure or program;
- (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.

---

<sup>14</sup> For simplicity, the Commission will portray these proposed revisions as consisting entirely of new language; parties should refer to existing Rule R8-68(c)(2), which shows that most of the provision exists in current rules.

(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;

(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;

(f) the estimated load shape impacts; and

(g) a description of how the measure's impacts will be evaluated, measured, and verified.

#### Issue 73: Costs And Benefits Of EE/DSM Programs, Communications And M&V Costs

The current Rule R8-68(c)(2)(iii) details the information required in a DSM/EE program application regarding the costs and benefits of the measure or program. PEC recommends amending this rule to include communications and M&V costs by adding the following underlined language:

(iii) 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 advertising-communications costs, and the costs of measurement and verification) and the planned accounting treatment for those costs and benefits; (b) the type, amount, and 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.

PEC argues that the reporting of costs relating to communications activities, which now resides in paragraph R8-68(c)(2)(v), should be consolidated into paragraph R8-68(c)(2)(iii) for uniformity. As a consequence of PEC's proposal, it also

proposes to strike the entire Communications paragraph of Rule R8-68(c)(2)(v), which is as follows:

(v) Communications. — The electric public utility or electric membership corporation shall provide detailed cost information on the amount it anticipates will be spent 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. To the extent available, the electric public utility or electric membership corporation shall include examples of all communication materials to be used in conjunction with the measure or program.

The Public Staff disagrees, noting that PEC's proposed consolidation would not incorporate the existing requirement to provide "detailed information" regarding communication costs. Based on the Commission's interest in the costs and impacts of communications materials associated with energy efficiency and demand-side management programs and measures, the Public Staff states that this information remains relevant to the Commission's consideration of a petition for approval of a new energy efficiency or demand-side management measure or program. Therefore, the Public Staff recommends that each utility or EMC should continue to be required to provide detailed cost information on the amount it anticipates it will spend on communications materials and that the Commission should continue to include consideration of those specific costs in its consideration of the total costs of the program or measure. The Public Staff, however, does not object to PEC's general suggestion that information regarding the costs of communications materials be included in the paragraph on Costs and Benefits.

The Commission agrees with the Public Staff that it is interested in the costs and impacts of communications materials associated with EE and DSM programs. The Commission believes that such materials can be an integral component of such programs, and therefore will require electric public utilities and electric membership corporations to provide not only "examples of all communication materials to be used with the measure or program," as currently required, but also the costs of those materials. The Commission will amend Rule R8-68(c)(2)(ii)(d), as shown in Appendix A, to require that communication materials costs be included with DSM/EE program applications. The Commission will also amend Rule R8-68(c)(2)(iii) as shown below and in Appendix A and renumbered to be provision (iv), so that communication costs, in addition to advertising costs, are considered in program cost/benefit analyses. Finally, as suggested by the Public Staff, the Commission will consolidate the current requirements of Rule R8-68(c)(2)(v) regarding communications costs into the provision regarding costs and benefits.

Rule R8-68(c)(3)(i) and (iii) require the electric public utilities to file detailed M&V plans, as well as provide information on the cost of those plans. These requirements

currently apply only to electric public utilities. While the Public Staff does not want to add this detailed M&V requirement to the EMCs at this time, it believes that the estimated costs of an EMC's M&V of the proposed measure or program is relevant to the Commission's consideration of the total costs and benefits of that proposed measure or program. Therefore, the Public Staff does not object to PEC's proposal to include the costs of M&V as an express requirement of Rule R8-68(c)(2)(iii), thereby making it apply to both EMCs and electric public utilities.

The Commission agrees with the Public Staff's reasoning, and notes, in addition, that EMCs will likely want to apply M&V costs towards the REPS cost cap. The Commission notes that the Public Staff's proposed revisions would also require the electric public utility or EMC to provide "the maximum and minimum amount of participation incentives" to be paid. The Commission believes that this change will be helpful as it reviews DSM/EE program applications, and will, therefore, make the modification. Therefore, to address communications costs, M&V costs, and participation incentives, the Commission will adopt the following revisions to current

Rule R8-68(c)(2)(iii), which will be renumbered and modified as shown below and in Appendix A:

~~(iii)~~(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; advertising and advertising 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.

#### Issue 74: Cost-Effectiveness Evaluations

PEC proposes amending current Rule R8-68(c)(2)(iv), which pertains to the information required regarding the cost-effectiveness evaluations of the proposed measure or program, by adding the following sentence: In addition, the 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. PEC argues that this will make the paragraph uniform with respect to rules covering cost-effectiveness testing and consolidate other sections.

The Public Staff disagrees, however. The language that PEC proposes to add is from the Additional Filing Requirements portion of Rule R8-68(c)(3)(i) that today applies to electric public utilities only. The Public Staff does not believe that the requirements applying to EMCs should be amended unless it is to streamline application of Rule R8-68 as outlined by the Commission. The Public Staff argues that the Commission should deny PEC's request to amend R8-68(c)(2)(iv), and that the Rule should remain as is.

The Commission agrees with both PEC and the Public Staff. As shown in Appendix A, this requirement will continue to apply only to electric public utilities as Rule R8-68(c)(2)(v), Cost-Effectiveness Evaluation. In order to address the Public Staff's concern, the Commission will adopt a slightly different version of PEC's proposal, drafted so as not to apply to electric membership corporations:

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.

#### Issue 75: Re-Locating References To Guidelines Regarding Incentive Programs Into Rule R8-68

PEC proposes to delete Rule R8-68(c)(2)(vi) as follows:

~~(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.~~

PEC proposes that paragraph R8-68(c)(2)(vi), the requirement to provide information relative to compliance with the Commission Guidelines Regarding Incentive Programs, be eliminated in its entirety, along with the Appendix to Chapter 8 of the



Rules.<sup>15</sup> PEC argues that, given the program filing requirements provided by the rulemaking for Senate Bill 3, this paragraph and the Appendix are redundant and should be deleted. The Public Staff disagrees with PEC's proposal to eliminate the Appendix entirely. The Appendix is the Commission's Revised Guidelines for Resolution of Issues Regarding Incentive Programs (Guidelines), issued by the Commission on March 27, 1996 in Docket No. M-100, Sub 124. In that docket, the Commission resolved certain issues concerning competition between electric and natural gas programs that provided incentives for participation under G.S. 62-140. G.S. 62-140 remains in effect, even with passage of Senate Bill 3. Therefore, the Public Staff believes that Rule R8-68 should continue to include the Guidelines, as these issues remain relevant.

In its reply comments, the Public Staff instead recommends a new paragraph R8-68(c)(2)(v), that would include a portion of the Guidelines pertaining to participation incentives provided by electric and gas utilities to third-party builders. This information is currently included in the Guidelines (Appendix to Chapter 8) at paragraph 3, which is as follows:

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: (a) a minimum number or percentage of all-gas or all-electric structures to be built in a given subdivision development or in total; or (b) 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.

The Public Staff recommends incorporating that paragraph from the Guidelines into Rule R8-68 as a new Rule R8-68(c)(2)(v) as follows:

(v) Information Regarding Participation Incentives Provided to Third Party Builders. – If a program or measure involves a participation incentive paid to a third party builder (residential or commercial), the electric public utility or electric membership corporation shall provide documentation showing that it has advised the builder(s): (1) of the availability of natural

---

<sup>15</sup> Chapter 8 of the Commission's Rules is an Appendix entitled Revised Guidelines for Resolution of Issues Regarding Incentive Programs. It is attached hereto near the end of Appendix A. In this context, incentives means a "participation incentive" as defined in Rule R8-68(b)(7), specifically, "any consideration associated with a new demand-side management or energy efficiency measure."

gas or electric alternatives, as appropriate; (2) that the builder(s) may receive the participation incentive on a per structure basis without having to agree to a minimum number or percentage of all gas or electric structures to be built in a given subdivision development or in total; or to the type of any given structure (gas or electric) to be built in a given subdivision or development; and (3) that the builder 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. Electric public utilities may continue to promote and pay incentives for all-electric structures respectively, provided such programs are approved by the Commission.

The Public Staff proposes this explicit addition to Rule R8-68 because of PEC's proposed deletion of filing requirement Rule R8-68(c)(2)(vi).

The Public Staff also states that some of the Guidelines are obsolete or redundant. For example, paragraphs 1(b), 1(c), paragraph 7, and portions of paragraph 5 of the Guidelines concern the timing of certain filings after the Guidelines were issued. The Public Staff believes that these paragraphs may now be eliminated. Moreover, paragraphs 1 and 1(f) are superseded by G.S. 62-133.9 and the Commission's Rules R8-68 and R8-69 with respect to requiring cost-effectiveness and participant incentive information when applying for approval of new energy efficiency and demand-side management programs and measures and with respect to rate recovery.

The Public Staff also believes that the Guidelines, which resulted from a previous Commission proceeding, remain in effect regardless of the outcome of this rulemaking, even if the need to expressly attach them to these procedural rules regarding program approval and cost-recovery no longer exists. For example, paragraph 1(d) of the Guidelines provides that the Commission cannot resolve the matter of the "relative efficiency of electricity versus natural gas under various scenarios" and that "a better approach at this time would be to determine the acceptability of incentive programs based on the energy efficiency of electricity alone or natural gas alone, as applicable." At the time the Guidelines were developed, natural gas and electric incentives programs were both approved under Commission Rule R1-38. Now, however, the Rules provide for separate consideration of natural gas incentive programs under Rule R6-95 and electric incentive programs under Rule R8-68. Therefore, while that provision of the Guidelines remains in effect, it is no longer necessary to include it expressly in Rule R8-68, according to the Public Staff.

The Public Staff believes, however, that paragraphs 1(a), 1(e), as well as paragraphs 2(a) - (c) and 3(a) - (c), should be generally retained for purposes of the filing requirements set forth in Rule R8-68. To that end, the Public Staff recommends incorporating those provisions into the text of Rule R8-68 itself rather than presenting them in a separate Appendix.

Similarly, the Public Staff recommends locating all of the requirements for promotional programs in Rule R8-68 as follows:

(d) Promotional Programs. – If a program or measure involves a participation incentive under this Rule, and the participation 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.

(i) If the presumption that a program or measure 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.

(ii) If the presumption that a program or measure is promotional is successfully rebutted, the cost of the participation 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.

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

The Public Staff recommends incorporating paragraph 1(e) of the Guidelines into the Commission's scope of review for approval of new or modified energy efficiency or demand-side management programs or measures. The Public Staff recommends that the first sentence of Rule R8-68(e) be modified as follows:

(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 shall not consider the impact of an electric program on the sales of natural gas, or vice versa, but may consider any other information it determines to be relevant, including any of the following . . .

The Public Staff also seeks to relocate the portion of the Guidelines dealing with cost recovery into Rule R8-68(f). The Public Staff recommends substituting the following language from paragraph 1(f) of the Guidelines into Rule R8-68(f) as follows:

(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. Except for those costs found by the Commission to be unreasonable or imprudently incurred, the costs of those new demand-side management or energy efficiency measures, approved by application of this rule, that are found to be reasonable and prudently incurred shall be recovered only through the annual rider described in G.S. 62-133.9 and Rule R8-69. The Commission may also consider in the annual rider proceeding whether to approve any the inclusion of any utility incentive pursuant to G.S. 62-133.9(d)(2)a.-c. in the annual rider.

The Commission agrees with the Public Staff that Chapter 8 of its Rules, the Appendix entitled Revised Guidelines for Resolution of Issues Regarding Incentive Programs, is outdated. However, the Commission is reluctant to make changes relative to the Guidelines in this Docket because the Guidelines impact both gas and electric utilities, and gas utilities have not filed comments on this issue. Therefore, the Commission will decline to adopt changes that would move any Guideline provisions into Rule R8-68 at this time, but will instead request that the Public Staff work with the affected electric and natural gas utilities to develop a proposal for stream-lining and updating the Guidelines and file it with the Commission in Docket No. M-100, Sub 124 within three months.

#### Issue 76: M&V Plans

PEC proposes to move the language in Rule R8-68(c)(3)(i)(k), which states that the electric public utility shall include a description of how the measure's impacts will be evaluated, measured, and verified, into Rule R8-68(c)(3)(iii), which addresses M&V plans. The Public Staff does not object to PEC's proposed amendment but believes that certain additional revisions may clarify the paragraph further. The Public Staff recommends the following revised paragraph (c)(3)(iii), incorporating its proposed changes with PEC's proposal:

(iii) 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, tThe electric public utility shall:

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

b. shall provide a schedule for reporting the savings to the Commission. 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. If the electric public utility plans to utilize an independent third party for purposes of measurement and verification, an identification of the third party and all of the costs of third party should be included. The costs of implementing the measurement and verification process may be considered as operating costs;~~

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.

The Commission finds that the Public Staff's proposed revisions, as shown above, are reasonable and will, therefore adopt them as shown in Appendix A, but re-numbered as Rule R8-68(c)(3)(ii).

#### Issue 77: Cost Estimates For Utility Incentives

Rule R8-68(c)(3)(vi) provides that:

(vi) 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.

The Public Staff notes that the Commission has issued orders requiring additional information from PEC with respect to the above paragraph.<sup>16</sup> The Public Staff believes that incorporating the Commission's requested information expressly into the portion of Rule R8-68 setting forth the filing requirements for new programs would

---

<sup>16</sup> See, e.g., Order Requiring Additional Information, Docket No. E-2, Sub 950 (October 6, 2009) and Order Requiring Additional Information, Docket No. E-2, Sub 970 (January 15, 2010).

streamline the application process. Therefore, the Public Staff proposes that the following requirement be added at the end of Rule R8-68(c)(3)(vi):

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.

The Public Staff believes that its suggested language will provide the yearly estimates of utility incentives that the Commission has requested prior to approving new EE and DSM programs and measures in Docket No. E-2, Subs 950 and 970. The first sentence of the Public Staff's addition refers to the approved stipulation on cost recovery for DSM and EE programs with PEC in Docket No. E-2, Sub 931. Under that stipulation, as well as the Commission rules, PEC may seek to recover, in the appropriate cost recovery proceedings, its reasonable and prudent costs incurred in adopting and implementing EE and DSM measures, and, in certain circumstances, net lost revenues and a program performance incentive (PPI) separately for each proposed measure. Therefore, under the Public Staff's proposed language, PEC would file its estimated net lost revenues and estimated PPI for each year of its proposed recovery. The second sentence of the Public Staff's proposed addition refers to the approved stipulation with Duke in Docket No. E-7, Sub 831. Under that stipulation and the Commission's rules, Duke recovers, in the appropriate cost recovery proceedings, a utility incentive that is designed both to recover the costs of the program and to provide a utility incentive to Duke. In certain circumstances, Duke may recover net lost revenues separately from its recovery of the integrated program cost/utility incentive recovery. Therefore, under the Public Staff's proposed second sentence, Duke would file only its estimated net lost revenues for each year of the proposed recovery with its applications for approval of EE programs and measures.

The Commission believes that the Public Staff's proposed addition to Rule R8-68(c)(3)(vi) will speed the process of reviewing EE and DSM program applications because it will require the electric public utilities to provide information regarding all program costs, including utility incentives, with the initial application. Furthermore, no comments were filed in opposition to the Public Staff's recommendation. Therefore, the Commission will approve the Public Staff's proposed additional language to Rule R8-68(c)(3)(vi), re-numbered as necessary and with the slight clarifications noted below, and as shown in Appendix A:

(v) 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 period. 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.

#### Issue 78: Suspension Of Tariffs Related To EE And DSM Programs

Under Rule R8-68(c)(3)(v), the electric public utility "shall provide proposed tariffs or modifications to existing tariffs that will be required to implement each measure or program." The Public Staff states that G.S. 62-134(a) provides that no public utility shall make any changes in any rate which has been duly established under Chapter 62 without giving 30 days notice to the Commission, and that G.S. 62-134(b) provides that the Commission may suspend operation of a proposed rate for a period of no longer than 270 days from the time the rate would otherwise go into effect. The Public Staff argues that, because the electric public utilities are filing proposed tariffs with their applications for approval, the Commission is required to suspend the proposed tariffs on a case-by-case basis.<sup>17</sup> To eliminate the piecemeal suspension of tariffs, and to provide sufficient time for the investigation, review, and decision by the Commission on applications for approval of DSM and EE programs, the Public Staff proposes the following subdivision be added as a new Rule R8-68(d)(1):

(1) 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.<sup>18</sup>

While PEC does not object to the Public Staff's proposal to automatically suspend tariffs, so long as existing provisions relative to service of filings, responses, public notice, and procedural schedules remain intact, PEC believes the 300-day suspension period (270 days plus 30 days) in G.S. 62-134 was intended for major rate changes, and is longer than needed for tariffs filed to implement DSM and EE programs. Therefore, PEC proposes to delete the reference to G.S. 62-134 in the Public Staff's proposed new rule, and instead provide for an automatic suspension of DSM/EE program tariffs for up to 45 days following filing. If the Commission schedules the matter for hearing, the tariff would be automatically suspended for up to 75 additional days. PEC's concern is that the Public Staff's proposal would create an apparent conflict between a 300-day maximum extension period and the existing Rule R8-68(d)(1), which requires a hearing in 90 days.

---

<sup>17</sup> See, e.g., Order Suspending Tariff Filing, Docket No. E-2, Sub 927 (May 15, 2008).

<sup>18</sup> Under the Public Staff's proposal, the current R8-68(d)(1) and (d)(2) would be renumbered (d)(2) and (d)(3), respectively.

The Commission finds good cause to approve the Public Staff's proposed rule revision, as shown in Appendix A. G.S. 62-134 is the statute that authorizes the Commission to suspend proposed tariff filings and it is entirely appropriate, if not necessary, to include a reference to that statute in the rule revision adopted herein. PEC's procedural concerns are misplaced in that Rule R8-68(d) clearly sets forth procedural requirements and guidelines that remain intact and are sufficient to ensure against unreasonable processing delays for applications requesting approval of new programs. Furthermore, the suspension language proposed by the Public Staff generally tracks the language used by the Commission in suspension orders. The Commission always endeavors to consider applications in the most expeditious manner possible and will continue to do so in the future in order to minimize, to the maximum extent practicable, any potential for procedural unfairness or denials of due process to the parties to a proceeding.

#### Issue 79: Parties May Comment On DSM/EE Program Applications

Existing Rule R8-68(d)(1) outlines the procedure for service and response for applications for approval of DSM and EE programs by electric public utilities and electric membership corporations. The third sentence of this subdivision provides that: "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 Rule R1-19 or file a protest pursuant to Rule R1-6." The Public Staff states that this language originated with the now superseded Commission Rule R1-38. Having gained experience in reviewing applications for DSM and EE programs, the Public Staff believes it is appropriate to characterize its reporting of its review and recommendations concerning such applications as "comments," instead of a "protest" as defined by Rule R1-6. Moreover, the Public Staff believes that the scope of its comments may be broader than simply recommending approval or disapproval. Therefore, it recommends the following revisions to the current Rule R8-68(d)(1):

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 or file a protest pursuant to Rule R1-6 and, if desired, to 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 that it believes requires further investigation. The filing electric public utility or



electric membership corporation shall have the opportunity to respond to the petitions or protests 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.

While no party opposes the Public Staff's proposed revision, the Commission notes that it should remain procedurally possible for a party to protest a DSM or EE program application. Therefore, the Commission will accept the Public Staff's proposal with slight modifications to allow for protests, as follows and as shown in Appendix A, with re-numbering as necessary:

(4)(2) Service and Response. – ... 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, or 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, or 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.

#### **Amendments to Rule R8-69. Cost Recovery for Demand-Side Management and Energy Efficiency Measures of Electric Public Utilities**

Rule R8-69 addresses cost recovery of DSM and EE programs by electric public utilities, as well as utility incentives and the ability of large customers to "opt out" of programs, including paying any program costs via the DSM/EE rider.

#### **Issue 80: Interest And Return Calculations On Refunds And Deferral Account Balances**

Subdivisions (b)(3) and (b)(6) of Rule R8-69 each address the interest associated with an electric public utility incurring and recovering DSM and EE costs. In particular, subdivision (b)(3) deals with interest on refunds pursuant to G.S. 62-130(e) and reads as follows:

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.

Subdivision (b)(6), which authorizes deferral accounting for costs considered for recovery through the annual rider, reads, in pertinent part, as follows:

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 Public Staff explains that these two provisions can conflict for two reasons. First, subdivision (b)(6) provides for a return on the deferral account balance, without regard for whether that balance represents a net over-recovery or net under-recovery of DSM and EE costs, while subdivision (b)(3) provides only for interest on over-recoveries of DSM and EE costs. Second, subdivision (b)(6) provides that the return on the deferral account balance shall be accrued using the net-of-tax rate of return approved in the applicable electric public utility's most recent general rate proceeding; subdivision (b)(3), on the other hand, states only that the interest rate used to calculate interest on an over-recovery shall be one that the Commission determines to be just and reasonable, but no greater than the maximum statutory rate. Historically, the Commission has found this just and reasonable rate to be 10% per annum.

The Public Staff notes that, in Appendix A to its reply comments filed in this docket on December 17, 2007, it recommended language very similar to that ultimately approved in subdivision (b)(3), but recommended deletion of language in subdivision (b)(6) authorizing a return on the deferral account. However, in its Order Adopting Final Rules, issued February 29, 2008, the Commission included both provisions in the approved Rule, stating on page 117 of the Order that the inclusion of the applicable language in subdivision (b)(6) was appropriate "[t]o encourage electric public utilities to pursue energy efficiency resources."

The Public Staff notes further that the Commission's explicit conclusion to include both return and interest provisions in the final Rule R8-69 appears to show that it intends for both a return on the DSM and EE cost deferral account balance and interest on net over-recoveries of DSM and EE costs. As noted above, however, these provisions provide for differing accrual mechanisms, at potentially different rates, to be applied to the same net dollars, possibly in the same time period. Rule R8-69(b) does not explain how such potential conflicts may be avoided. Therefore, the Public Staff recommends that the Rule be clarified to provide that, unless a different approach is found appropriate by the Commission in a specific DSM and EE cost recovery proceeding, the deferral account return authorized in subdivision (b)(6), as applicable to any net over- or under-recovery included in a DSM and EE Experience Modification Factor (DSM/EE EMF), ceases to be accrued as of the effective date of rates including that EMF. As of that date, any net over-recovery included in the DSM/EE EMF would begin to accrue interest according to the provisions of subdivision (b)(3). The Public Staff believes that this approach will appropriately balance the two interest and return

provisions in Rule R8-69. To accomplish its recommendation, the Public Staff proposes that subdivisions (b)(3) and (b)(6) be revised as follows:

(b)(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.

(b)(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.

No party objects to the Public Staff's proposed revisions to Rule R8-69(b)(3) and (6). The Commission finds that these modifications will properly clarify interest calculations and will, therefore, adopt them, as shown above and in Appendix A.

#### Issue 81: Obsolete Provision Regarding Duke

Rule R8-69(b)(7) provides that the Commission shall consider the treatment it approved in Docket No. E-7, Sub 828 of the revenues and costs related to Duke's existing DSM and EE measures when approving Duke's first annual rider. The Public Staff notes that, since this Rule was promulgated, the Commission has approved, with modifications, a settlement between the Public Staff, Duke, and the Southern Environmental Law Center with respect to the annual rider for Duke's DSM and EE programs in Docket No. E-7, Sub 831, and has approved rates for Duke in a general rate case, Docket No. E-7, Sub 909. Therefore, this Rule is no longer necessary, and it may be omitted.

No party objects to the Public Staff's proposed deletion of Rule R8-69(b)(7). The Commission finds the Public Staff's proposal to be appropriate, as the Duke matter is now moot, and will amend the Rule accordingly, as shown in Appendix A.

#### Issue 82: Notification Procedures Regarding Customers That Opt Out Of Utility DSM/EE Programs

PEC proposes to amend Rule R8-69(d) as follows:

(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 may elect not to participate in new demand-side management and energy efficiency measures under G.S. 62-133.9(f). Any customer that elects this option and notifies its electric public utility will, after the date of notification, Any such customer shall be exempt from any annual rider established pursuant to this rule after the date of notification.~~

PEC believes that the above change will better track the wording of G.S. 62-133.9(f).

PEC also proposes two additional changes that are intended to reduce the burden of multiple notifications to the Commission each time a customer "opts out." Specifically, rather than notifying the Commission of each discrete customer opt out within 30 days of its occurrence, PEC proposes two revisions that would allow electric public utilities to notify the Commission once a year by providing a list of all customers

that have opted out. To effectuate this change, PEC suggests that Rule R8-69(d)(2) be modified as follows:

(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.

In addition, PEC also proposes that Rule R8-69(d)(3) be revised as follows:

(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). ~~Within 30 days of the customer's election, the electric public utility shall notify the Commission of an industrial or large commercial customer that elects to participate in a new measure after having initially notified the electric public utility that it declined to participate.~~

The Public Staff states that it does not object to any of PEC's proposed changes, and none of the other parties offered comments on this issue. The Commission agrees that these changes will further streamline the Rule and will, therefore, approve PEC's proposed amendments as shown above and in Appendix A.

#### Issue 83: Clarification Of Required Energy And Demand Metrics

Rule R8-69(f) specifies the filing requirements and procedures for an electric public utility's DSM/EE rider. PEC recommends the following changes to Rule R8-69(f)(1)(ii)d and e:

(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:

...

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

...

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

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

Similarly, PEC recommends that Rule R8-69(f)(1)(iii)d and e be amended as follows:

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

PEC asserts that the requirement to provide energy-related metrics for a capacity-reducing measure is inappropriate. Similarly, PEC believes it is inappropriate to require capacity-related metrics for energy-saving measures.

The Public Staff agrees with PEC's suggested revisions to Rule R8-69(f)(1)(ii)d and e, and does not oppose PEC's suggested revisions to Rule R8-69(f)(1)(iii)d and e. No party opposes these revisions. The Commission finds these changes to be reasonable but believes additional modifications would make these provisions more clear. Therefore, the Commission will amend Rule R8-69(f)(1)(ii) and (iii) as follows, and as shown in Appendix A:

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

...

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

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

...

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

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

#### Issue 84: Inadvertent Omission Of The Word "Public"

PEC proposes that Rule R8-69(f)(2) be amended to correct the omission of "public" from electric utility. No party objects to PEC's proposed correction. The Commission will make the correction, as shown in Appendix A.

#### Other Proposals

#### Issue 85: Use NC-RETS To Replace Paper Filings

NCSEA contends that NC-RETS "should be fully leveraged" by using it as much as possible in lieu of paper filings to record REPS compliance data, thereby reducing auditing and accounting burdens and minimizing the cost of compliance. The Public Staff generally agrees with NCSEA's contention. However, the Public Staff states that the specific rule changes that NCSEA proposes for this purpose are difficult to understand because they are based on proposals that PEC informally circulated among the parties, but ultimately chose not to file with the Commission. The Public Staff suggests that the Commission consider requesting the NC-RETS Stakeholder Group to investigate methods of leveraging the tracking system and asking the group to issue a report on rule changes that could most effectively accomplish this purpose.

The Commission supports the Public Staff's suggestion to solicit ideas from the NC-RETS Stakeholder Group for better leveraging the tracking system, and observes that NC-RETS just began operations July 1, 2010. The Commission believes that the Stakeholder Group will benefit from having much more time using NC-RETS, especially in the context of these rule revisions. Therefore, while the Commission is open to suggestions from the Stakeholder Group, it will decline to specifically solicit their ideas at this time.

Issue 86: Climate Registry Members Should Be Exempted From Registering With The Commission

Dominion asserts that The Climate Registry is an organization whose members "must fulfill rigorous inventory, verification and reporting protocols which should satisfy the compliance and verification standards set forth under Rule R8-66," and that renewable energy facilities that are members of The Climate Registry should be exempted from the requirement to register with the Commission. In the Public Staff's view, registration under Rule R8-66 is not a burdensome obligation. If members of The Climate Registry are relieved of the obligation to register with the Commission, other registries are likely to request similar status. When there is a need to obtain information quickly about a particular renewable energy facility, it is very helpful to the Commission, the Public Staff, and other interested parties to have the data readily available in the Commission's files instead of having to search throughout multiple registries. The Public Staff, therefore, opposes Dominion's proposal.

The Commission believes that the registration process serves to ensure that RECs eligible for REPS compliance originate from facilities that meet the specific requirements set forth in Senate Bill 3. Therefore, while the information required by the Commission might have already been supplied to The Climate Registry, The Climate Registry is not making any determination of the facility's status as does the Commission in issuing an order accepting or denying registration. Therefore, the Commission will decline to adopt Dominion's proposal.

IT IS, THEREFORE, ORDERED as follows:

1. That parties may comment on Appendix A, the Commission's revised Rules R8-64 through 69, and the NC-RETS Interim Operating Procedures issued July 1, 2010, in Docket No. E-100, Sub 121, on or before August 20, 2010. The Commission specifically requests comments as to whether any conflicts or inconsistencies exist between the NC-RETS Interim Operating Procedures and the revised Rules R8-64 through R8-69 in Appendix A.

2. 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.

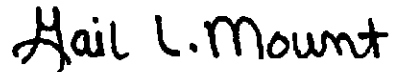


3. That the NC-RETS Administrator shall, by February 1, 2012, provide the Commission data showing the number of accounts and the number of RECs associated with them that can be attributed to REC aggregators and brokers, and that data will be filed in Docket No. E-100, Sub 121.

ISSUED BY ORDER OF THE COMMISSION.

This the 3<sup>rd</sup> day of August, 2010.

NORTH CAROLINA UTILITIES COMMISSION

A handwritten signature in black ink that reads "Gail L. Mount". The signature is written in a cursive, flowing style.

Gail L. Mount, Deputy Clerk

kh080310.01

**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, and business telephone number, and electronic mailing address of the facility ownerapplicant;

(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, and 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; and the projected annual sales in kilowatt-hours; and the applicant's general plan for the disposition of renewable energy certificates or other environmental attributes; 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 3015 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 462 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 ~~30~~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 ~~46~~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, ~~or by an electric power supplier with a compliance plan under Rule R8-67(b) if the facility is owned by the electric power supplier or under contract to the electric power supplier as of the effective date of this rule.~~ All relevant renewable energy facilities shall be registered prior to ~~the electric power supplier filing its REPS compliance report pursuant to Rule R8-67(c).~~ 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: ~~information set forth in paragraphs (i) through (v) and paragraph (xi) of subsection (b)(1) of Rule R8-64, a description of the technology used to produce electricity, and the facility's projected dependable capacity in megawatts by generating unit. If the~~

~~facility is not yet completed and in operation, the owner shall also file the information prescribed in paragraph (ix) of subsection (b)(1) of Rule R8-64.~~

~~(2) The owner of each renewable energy facility required to file Form EIA-923 with the Energy Information Administration (EIA), United States Department of Energy, shall include with its registration statement a copy of Schedules 1, 5, 6 and 9 from its most recent Form EIA-923 and shall file a copy of those Schedules with the Commission each year at the same time the information is provided to the EIA. The owner of a renewable energy facility that is not required to file Form EIA-923 with the EIA shall nevertheless file the information required by Schedules 1, 5, 6 and 9 with its registration statement and by April 1st of each year thereafter.~~

(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 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.

(32) 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.

(43) 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.

(54) 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. ~~The owner shall also annually report whether it sold any renewable energy certificates (whether or not bundled with electric power) during the prior year and, if so, how many and to whom.~~

(65) 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.



(76) 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 ~~30~~<sup>15</sup> 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 ~~16~~<sup>2</sup> 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; or

(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 North Carolina~~this state~~, as of the date the contract is executed, for purchases of electricity from qualifying facilities pursuant to the provisions of 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 ~~such a~~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,~~;~~ provided, however, ~~that development of such estimates of avoided cost by an electric public utility shall include~~taking into consideration ~~of 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 and, ~~unless determined in a manner approved otherwise by the Commission pursuant to subsection (c)(4), determined in the same manner as that information is reported to the Energy Information Administration (EIA), United States Department of Energy, for annual electric sales and revenues reporting.~~

(5) "Utility compliance aggregator" is an organization that assists an electric power supplier in demonstrating its compliance with REPS. Such demonstration may include 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 at least the current and 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) ~~the electric power supplier's registration information and certified statements required by Rule R8-66;~~ to the extent they have not already been 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: ~~and direct testimony and exhibits of expert witnesses:~~

(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 to comply with G.S. 62-133.8(b), (c), (d), (e) and (f);

(v) a comparison of actual compliance costs 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);

(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) For each renewable energy facility providing renewable energy certificates used by the electric power supplier to comply with G.S. 62-133.8(b), (c), (d), (e) and (f): the name, address, and owner of the renewable energy facility; and an affidavit from the owner of the renewable energy facility certifying that the energy associated with the renewable energy certificates was derived from a renewable energy resource, identifying the renewable technology used, and listing the dates and amounts of all payments received from the electric power supplier and all meter readings 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, no later than 30 days prior to the time that it files 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 ~~shall~~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 additional 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 ~~calendar year~~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 ~~may~~shall be collected through fixed monthly charges, ~~energy-based amounts per kilowatt-hour, or by a combination of both.~~ 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) Incurred costs may be recovered by an electric public utility in any year 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 total annual incremental costs recovered from customers~~incurred~~ in that year do not exceed 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 certificates 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 ~~with a nameplate capacity of 1 MW or less~~ interconnected on the customer's side ofbehind the utility meter at a customer's location may be measured accurately 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 ~~this~~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 comply with the meter testing requirements of Rule R8-13.~~

(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 megawatt-hour certificate for every 3,412,000 British thermal units (Btu) of useful thermal energy produced. 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.

~~(5) Except in those cases where the electric meter is supplied by and read by an electric power supplier, electric generation or thermal energy production data is subject to audit by the Commission, the Public Staff, or an electric power supplier.~~

(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 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 or another REC tracking system, but by no means shall a facility's meter data for the same time period be used for simultaneous REC issuance in two such systems. 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. 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 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 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 proposed to be used, (e) the proposed classes of persons to whom it will be offered, and (f) the duration of the proposed measure or program.~~

~~(ii) Description. — The electric public utility or electric membership corporation shall describe each measure or program, including its duration, purpose, estimated number of participants, and the impact of 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.~~

(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;
- 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;

f. the estimated load shape impacts; and

g. a description of how the measure's impacts will be evaluated, measured, and verified.

~~(iii)~~(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; advertising 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.

~~(iv)~~(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.

~~(v) Communications.~~ — ~~The electric public utility or electric membership corporation shall provide detailed cost information on the amount it anticipates will be spent 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. To the extent available, the electric public utility or electric membership corporation shall include examples of all communication materials to be used in conjunction with the measure or program.~~

(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) Description. — The electric public utility shall describe:~~
  - ~~a. the measure's objective;~~
  - ~~b. total market potential;~~
  - ~~c. the proposed marketing plan;~~
  - ~~d. the targeted sector;~~
  - ~~e. the estimated market growth throughout the life of the measure;~~
  - ~~f. estimated summer and winter peak demand reduction by unit metric and in the aggregate by year;~~
  - ~~g. estimated energy reduction per appropriate unit metric and in the aggregate by year;~~
  - ~~h. estimated lost energy sales per appropriate unit metric and in the aggregate by year;~~
  - ~~i. estimated load shape impacts;~~
  - ~~j. a description of the market barriers to the proposed measure or program and how the electric public utility intends to address them;~~

~~k. a description of how the measure's impacts will be evaluated, measured, and verified; and~~

~~l. a description of the methodology used to produce the impact estimates, as well as, if appropriate, methodologies considered and rejected in the interim leading to final model specification.~~

~~(ii)(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; and

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 ~~(iii)(ii)~~.

~~(iii)(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 paragraph ~~(i) (2)(iii)c~~ above and;

b. ~~shall~~ provide a schedule for reporting the savings to the Commission. ~~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. If the electric public utility plans to utilize an independent third party for purposes of measurement and verification, an identification of the third party and all of the costs of that third party should be included. The costs of implementing the measurement and verification process may be considered as operating costs.;~~

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.

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

~~(v)(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.

~~(vi)(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.

~~(4)~~(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, or 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.

~~(2)~~(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, Except for those costs found by the Commission to be unreasonable or imprudently incurred, the costs of those new demand-side management or energy efficiency 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 also consider in the annual rider proceeding whether to approve any 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.

~~(7) In approving the first annual rider pursuant to G.S. 62-133.9 for Duke Energy Carolinas, LLC, the Commission shall consider the treatment it approved in Docket No. E-7, Sub 828, of the revenues and costs related to Duke Energy Carolinas' existing demand-side management and energy efficiency measures or programs.~~

(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 may elect not to participate in new demand-side management and energy efficiency measures under G.S. 62-133.9(f). Any customer that elects this option and notifies its electric public utility will, after the date of notification, 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). ~~Within 30 days of the customer's election, the electric public utility shall notify the Commission of an industrial or large commercial customer that elects to participate in a new measure after having initially notified the electric public utility that it declined to participate.~~

(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 capacity, ~~energy, and~~ measure unit metric and in the aggregate;

e. total expected energy reduction in the aggregate and per appropriate capacity, ~~energy and~~ 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 capacity, ~~energy, and~~ measure unit metric in the aggregate, 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 capacity, ~~energy and~~ 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>19</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.

---

<sup>19</sup> All incentives referenced in these Revised Guidelines are participation incentives as now defined in Rule R8-68(b)(7).

(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.

(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

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 _____
If a corporation that is incorporated outside of North Carolina, is it domesticated in North Carolina?	<input type="checkbox"/> Yes <input type="checkbox"/> No

<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. Technology, including the source of its power or fuel(s).</p>	
<p>2. Whether it produces electricity, useful thermal energy, or both.</p>	
<p>3. Nameplate capacity in kW/MW (AC) 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. Attach a map, such as a county road map, with the location indicated on the map.</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 interest in the site?</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 of each type located at the facility but shall add an attestation that approvals for all of the turbines are available for inspection.

1. Federal permits and licenses:

2. State permits and licenses:

3. Exemptions required for construction and operation of the facility:

4. Statement of whether each has been obtained or applied for (attach copy of those that have been obtained with this application):

If the facility has been placed into service, on what date did the facility begin operating?

If the facility is not yet operating, on what date is the facility projected to be placed into service?



<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>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 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.

**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 REQUESTING COMMENTS ON  
Session Law 2007-397 ) MEASUREMENT AND VERIFICATION OF  
 ) REDUCED ENERGY CONSUMPTION

**BY THE COMMISSION:** On August 3, 2010, the Commission issued an Order in this Docket seeking comments from parties regarding amended rules for implementing Session Law 2007-397 (Senate Bill 3), especially as to whether they conflict with or are inconsistent with the NC-RETS Interim Operating Procedures that were issued July 1, 2010, in Docket No. E-100, Sub 121. On August 11, 2010, the Commission issued an Order extending the deadline for filing those comments.

While reviewing the REPS rules and parties' comments, the Commission identified several issues related to Senate Bill 3 implementation that the Commission believes warrant consideration by the Commission following separate comments and reply comments by the parties.

**Background**

G.S. 62-133.8(b)(2) allows electric public utilities to meet their general REPS compliance obligation, which begins with calendar year 2012, in a variety of ways, including:

- c. 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.

Similarly, G.S. 62-133.8(c)(2) allows electric membership corporations and municipal power suppliers to meet their general REPS compliance obligation, which begins with calendar year 2012, in a variety of ways, including:

- b. Reduce energy consumption through the implementation of demand-side management or energy efficiency measures.

Rule R8-67(c)(1)(i), as the Commission proposed to amend it, states as follows:

(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...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;  
[Emphasis added.]

Proposed Rule R8-67(h)(10) states:

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 these 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. [Emphasis added.]

### Discussion

The Commission is concerned that the processes and rules currently in place might not promote expeditious processing of REPS compliance reports once the general REPS compliance obligation takes effect in 2012 with reports to be filed in

2013. The Commission is also concerned that the Commission's rules might prove inadequate to ensure the credibility of the energy efficiency certificates issued in the North Carolina Renewable Energy Tracking System (NC-RETS) and used for compliance with REPS, especially as regards energy efficiency (EE) and demand-side management (DSM) activities of electric membership corporations and municipal power suppliers. In addition, it is possible that the current rules, where the only review of an electric public utility's measurement and verification (M&V) activities occurs in its annual EE/DSM rider proceeding, might result in lengthy EE/DSM rider proceedings and delay the Commission from acting on a utility's REPS compliance report while related M&V matters are being addressed.

The results of M&V activities are an important consideration in the context of both an electric public utility's REPS compliance report/rider and the utility's EE/DSM rider. M&V reports will help the Commission decide: (1) how much incentive/reward the utility can collect from its customers through the DSM/EE rider and (2) how many energy efficiency certificates it has achieved, which can then be counted toward its general REPS obligation, which begins in 2012. For electric public utilities, the initial submittals that start these two proceedings (the EE/DSM rider proceeding and the REPS compliance report/rider proceeding) are due to be filed with the Commission at the same time (the same filing date as their annual fuel and fuel-related charge adjustment submittals). The Commission currently does not require electric membership corporations or municipal power suppliers to file M&V plans or the results of any M&V studies.

NC-RETS gives all three kinds of electric power suppliers the ability to create energy efficiency certificates. However, the Commission's proposed amended rules only require the electric power suppliers to retain for audit "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."

As stated earlier, Senate Bill 3 provides that the reduced energy consumption from DSM programs may count toward REPS compliance for electric membership corporations and municipal power suppliers, but the Commission's rules do not provide a method for these electric power suppliers to translate the megawatt savings they achieve via DSM programs into "reduced energy consumption" metrics, that is, megawatt-hour savings.

In its February 8, 2010 comments filed in Docket No. E-100, Subs 118, 124 and 125, the Public Staff stated that it might be appropriate to clarify Rule R8-67(c)(1)(i) to explain the kinds of M&V estimates that would qualify for REPS compliance for electric membership corporations and municipalities. Subsequently, the Public Staff raised concerns about the lack of M&V data for electric membership corporations and municipal power suppliers in the April 1, 2010 reply comments it filed in response to the Commission's September 4, 2009 Order Requesting Proposed Amendments to Rules R8-64 Through R8-69 in Docket No. E-100, Sub 113. However, the Public Staff observed that the resolution of this issue appears to be a complicated matter, and that

there was no consensus on how to resolve it. Therefore, the Public Staff did not recommend addressing it in the rules streamlining proceeding. For similar reasons, the Commission did not provide for specific resolution of these issues in the streamlining proceeding, but instead is now soliciting comments and reply comments from the parties regarding these issues:

1. What kind of M&V documentation should be filed and/or made available for audit by each kind of electric power supplier that uses EE/DSM program achievements toward its general REPS obligation?
2. Whether and in what proceeding, if any, should the Commission review such M&V documentation in order to establish the savings from EE/DSM programs that may then be used by each kind of electric power supplier to comply with REPS?
3. What is the appropriate method for determining the energy savings achieved by an electric membership corporation or municipal power supplier's DSM measure or program?
4. Should electric membership corporations be required to include an M&V reporting plan in their EE/DSM program applications similar to the plan required of electric public utilities under the Commission's proposed Rule R8-68(c)(3)(ii)?

IT IS, THEREFORE, ORDERED as follows:

1. That parties may comment on the questions provided herein on or before October 15, 2010, and may submit reply comments on or before November 19, 2010; and,
2. That electric power suppliers shall refrain from creating energy efficiency certificates in NC-RETS until these issues are resolved by Commission order, which order will allow electric power suppliers to create energy efficiency certificates for reduced energy consumption achieved after January 1, 2008, if otherwise appropriate.

ISSUED BY ORDER OF THE COMMISSION.

This the 24<sup>th</sup> day of August, 2010.

NORTH CAROLINA UTILITIES COMMISSION

*Gail L. Mount*

Gail L. Mount, Deputy Clerk

**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 Session Law 2007-397	) ) ) )	<b>ORDER REQUESTING COMMENTS ON USE OF THERMAL RECS TO SATISFY POULTRY WASTE SET-ASIDE REQUIREMENT</b>
--	------------------	--

**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 meet the poultry waste set-aside requirement, 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.

Peregrine now argues that, assuming the Public Staff's interpretation of G.S. 62-133.8(f) is correct, 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." Even if the Public Staff's interpretation is correct as a matter of law,

as a matter of physics, economy and efficiency, it makes little sense, at a "steam-host" site with thermal needs, to convert the heat produced in the boiler into electricity and not encourage the waste energy or exhaust heat produced in this process to be captured and reused as renewable thermal energy. All the energy wasted in the "electric-only" process will, in turn, drive the cost of REPS compliance unnecessarily higher. Such a result



would surely violate the spirit of [Senate Bill 3], even if it doesn't violate the express words of the Statute.

Peregrine notes that the Public Staff, in its comments, "indicated that it might be willing and able to support a proper Petition" to invoke the off-ramp to modify the statutory requirement. Peregrine further argues:

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" provisions by the Commission to encourage renewable energy development and competition by allowing the poultry waste set aside to recognize both the useful thermal and electric energy is in the public interest and ought to be approved.

Peregrine notes that electric power suppliers need to make decisions about poultry waste set-aside compliance within the next few months in order for renewable energy developers to be in a position to secure certain federal investment tax credits and grants, and encourages the Commission to proceed as expeditiously as it can on this matter. Peregrine, therefore, requests that the Commission (1) accept this Petition as a request for an off-ramp modification of G.S. 62-133.8(f) pursuant to the provisions of G.S. 62.133.8(i)(2) and Commission Rule R8-67(c)(5); (2) request comments on the Petition by the electric power suppliers, the Public Staff, the Attorney General and other interested parties; and (3) enter an Order using the off-ramp authority to modify existing G.S. 62-133.8(f).

On August 12, 2010, and August 18, 2010, respectively, Progress Energy Carolinas, Inc., and GreenCo Solutions, Inc., filed letters supporting Peregrine's Petition.

### Discussion and Conclusions

G.S. 62.133.8(i)(2) provides as follows:

- (i) Adoption of Rules. – The Commission shall adopt rules to implement the provisions of this section. In developing rules, the Commission shall:
  - (2) Include a procedure to modify or delay the provisions of subsections (b), (c), (d), (e), and (f) of this section in whole or in part if the Commission determines that it is in the public interest to do so. The procedure adopted pursuant to this subdivision shall include a requirement that the electric power supplier demonstrate that it made a reasonable effort to meet the requirements set out in this section.

Commission Rule R8-67(c)(5), adopted to implement the off-ramp provision, states as follows:

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.

After careful consideration, the Commission finds good cause to allow the Public Staff and other interested parties to file comments and reply comments on the relief requested by Peregrine in its Petition: whether the Commission should invoke the off-ramp provision, G.S. 62-133.8(i)(2), to allow thermal RECs to be used to satisfy the poultry waste set-aside requirement, G.S. 62-133.8(f). If the Commission were to invoke the off-ramp provision in response to this request by Peregrine, it is unclear from the statute and Rule who should make the required demonstrations and how such demonstrations would be made. The Commission further finds good cause to allow the Public Staff and other interested parties to 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, G.S. 62-133.8(f). Conflicting arguments were presented by GES and the Public Staff, the only parties to address this issue, and the Commission is interested in receiving comments from others. The Commission notes that some parties have already filed comments in response to Peregrine's Petition, and will require other comments and reply comments to be filed on an expedited basis.

IT IS, THEREFORE, ORDERED as follows:

1. That the Public Staff and other interested parties may file written comments as provided herein on or before Wednesday, September 8, 2010;
2. That any party may file written reply comments on or before Wednesday, September 15, 2010; and

3. That the Commission shall proceed as it deems appropriate upon receipt of the parties' comments and reply comments.

ISSUED BY ORDER OF THE COMMISSION.

This the 25<sup>th</sup> day of August, 2010.

NORTH CAROLINA UTILITIES COMMISSION

*Gail L. Mount*

Gail L. Mount, Deputy Clerk

Sw082510.01

**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 Session Law 2007-397	) ) )	ORDER CONVENING WORKING GROUP ON UNMETERED SOLAR THERMAL RECS
--	-------------	---

BY THE COMMISSION: Pursuant to G.S. 62-133.8(a)(6), a renewable energy certificate (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.

Commission Rule R8-67(g)(4) provides as follows:<sup>1</sup>

Thermal energy produced by a combined heat and power system or solar thermal energy facility shall be the thermal energy recovered and used for

---

<sup>1</sup> In its August 3, 2010 Order Requesting Comments on Modifications to Rules R8-64 Through R8-69 and Interim Operating Procedures issued in this docket, the Commission proposed amending Rule R8-67(g)(4) as follows:

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 megawatt-hour certificate for every 3,412,000 British thermal units (Btu) of useful thermal energy produced. 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.

Additionally, the Commission proposed requiring, in Rule R8-67(h)(7), that "[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 [North Carolina Renewable Energy Tracking System] at least every 12 months." The Commission proposed defining "qualifying thermal energy output" in Rule R8-67(h)(1)(iv) as

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).

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 megawatt-hour for every 3,412,000 British thermal units of useful thermal energy produced

On July 21, 2010, the Commission issued an Order in Docket No. RET-10, Sub 0 accepting the registration of an unmetered solar thermal facility owned by North Mecklenburg Aquatics d/b/a Nomad Aquatics & Fitness (Nomad). In that case, the Commission determined, based upon an engineering analysis, that the thermal energy actually used to maintain the temperature of the swimming pools was significantly less than the capacity of the solar thermal facility installed at that location.

It has come to the Commission's attention that, in lieu of such engineering analyses, many solar industry developers would propose to use a computer software model to calculate the number of thermal RECs generated by an unmetered solar thermal facility. The Commission is concerned, however, that the software model will only estimate the capacity of the solar thermal facility to generate thermal energy and will *potentially overestimate the amount of thermal energy generated by the facility that was actually used in a solar thermal application*.

The Commission believes that the Public Staff, together with technical experts in the solar industry and other interested stakeholders, are in the best position to recommend appropriate assumptions and methodology for reasonably estimating the useful thermal energy produced by an unmetered solar thermal facility. The Commission, therefore, will request that the Public Staff convene a working group of technical experts and other interested stakeholders to make recommendations to the Commission within three months of the date of this Order 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.

IT IS, THEREFORE, SO ORDERED.

ISSUED BY ORDER OF THE COMMISSION.

This the 25<sup>th</sup> day of August, 2010.

NORTH CAROLINA UTILITIES COMMISSION

*Gail L. Mount*

Gail L. Mount, Deputy Clerk



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

August 31, 2010

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:

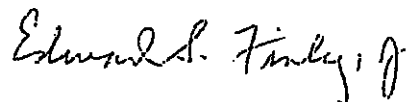
In August 2007, the North Carolina General Assembly enacted comprehensive energy legislation, Session Law 2007-397 (Senate Bill 3), that, among other things, establishes a Renewable Energy and Energy Efficiency Portfolio Standard (REPS) for this State. As part of this legislation, the General Assembly 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 September 15, 2010, is appreciated so that the Commission may meet its October 1, 2010, deadline.

Secretary Dee Freeman  
August 31, 2010  
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 black ink, reading "Edward 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

September 3, 2010

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

BY HAND DELIVERY

Dear Mr. Finley,

I am writing in response to your letter of August 31, 2010 to Secretary Freeman requesting any 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 Standards (REPS).

No renewable energy facility has progressed far enough in the permitting process to generate public comment on an individual project. Since the last REPS report, however, the Renewable Energy Committee of the Environmental Management Commission has continued to review the direct, secondary and cumulative environmental impacts of various renewable energy technologies. Much of the Renewable Energy Committee's activity of the past year has been focused on the potential impacts of using woody biomass as a renewable energy source.

In March, the Committee completed a report entitled "Forest Resource Impacts of the Woody Biomass Industry in North Carolina" and transmitted that report to the Environmental Review Commission of the General Assembly. The appendices to the report include comments from the N.C. Forestry Association, the N.C. Biofuels Center and Environmental Defense Fund (jointly), DENR's Division of Natural Resource Planning and Conservation, the Southern Environmental law Center, and the electric utilities on the potential impacts of expanded use of woody biomass as a fuel source. A copy of the report is enclosed.

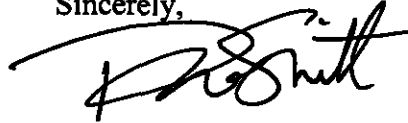


September 3, 2010

Page 2

Please feel free to contact me at 919-715-4141 if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "R. W. Smith", with a large, sweeping flourish above the name.

Robin W. Smith  
Assistant Secretary for Environment

cc (w/o enclosure):

Secretary Dee Freeman

James C. Gulick (Attorney General's Office)

Dickson Phillips (Chair, EMC Renewable Energy Committee)

One  
North Carolina  
*Naturally*



## ENVIRONMENTAL MANAGEMENT COMMISSION

NORTH CAROLINA  
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

Stephen T. Smith  
Chairman  
Charles Peterson  
Vice Chairman

Beverly Eaves Perdue, Governor  
Dee Freeman, Secretary

Yvonne C. Bailey  
Donnie Brewer  
Thomas F. Cecich  
Stan L. Crowe  
John S. Curry  
Marion Deerpake  
Tom Ellis  
William L. Hall, Jr.

Ernest W. Larkin  
Kevin Martin  
David H. Moreau  
Jeffrey V. Morse  
Darryl D. Moss  
David B. Peden  
Dickson Phillips III  
Forrest R. Westall, Sr.

To: The Honorable Robert C. Atwater, Co-chair  
The Honorable Daniel G. Clodfelter, Co-chair  
The Honorable Lucy T. Allen, Co-chair  
The Honorable Pryor A. Gibson, III, Co-chair

From: Stephen T. Smith, Chairman, NC Environmental Management Commission  
Dickson Phillips, III, Chairman, EMC Renewable Energy Committee

Re: "Report Concerning Forest Resource Impacts of the Woody Biomass Industry in North Carolina"

Date: March 16, 2010

Senate Bill 3 (session-law 2007-397) provided the Environmental Management Commission (EMC) with the authority to evaluate renewable energy technologies and establish environmental standards to ensure that renewable energy facilities do not harm the environment.

We are pleased to send you the attached report on the potential forest resource impacts of woody biomass facilities in North Carolina. As outlined in detail in the report, during the course of the last nine months the EMC's Renewable Energy Committee heard a number of presentations on this subject and convened an advisory group to assist with our findings and recommendations. It is important to note that the scope of this report is limited and that other recommendations may follow. The report focuses on the potential natural resource impacts that would likely arise from increased harvesting, changes in harvesting practices, and land use conversions to meet a growing demand for wood to serve the new state-created market for biopower.

The attached report was approved by the Renewable Energy Committee on March 10, 2010 and by the full EMC on March 11, 2010.

If you have any questions or would like further information, please contact Dickson Phillips at [dphillips@lapgh.com](mailto:dphillips@lapgh.com) or (919) 967-8989 or Steve Smith at [smith@mspraleigh.com](mailto:smith@mspraleigh.com) or (919) 821-5124.

cc: The Honorable Joe Hackney, Speaker of the House of Representatives  
The Honorable Marc Basnight, President Pro-Tempore of the Senate  
Mr. Edward S. Finley, Jr. Chair, NC Utilities Commission  
Mr. Tim Toben, Chair, NC Energy Policy Council

**Report to the  
Environmental Review Commission**

\*\*\*\*\*

**Report and Recommendations Concerning Forest Resource  
Impacts of the Woody Biomass Industry in North Carolina**

**March 2010**

**Submitted by the**

**North Carolina**

**Environmental Management Commission**

## **Table of Contents**

Executive Summary and Recommendations	1
Background	5
Woody Biomass Technical Advisory Group	7
Policy Decisions	9
Conclusion	16

### **Appendices**

- I List of Technical Advisory Group Members
- II Memo on Applicability of Federal Incinerator Rules
- III Memo on State Policy Options
- IV Comments Submitted by Advisory Group Members
  - A. NC Forestry Association
  - B. NC Biofuels Center and Environmental Defense Fund
  - C. NC Division of Natural Resource Planning and Conservation
  - D. Southern Environmental Law Center
  - E. Duke Energy Carolinas et al.
- V Summary of Existing Forestry Inventories

## **Executive Summary**

Senate Bill 3 (session law 2007-397) created a renewable energy and energy efficiency portfolio standard for North Carolina. Among other things, the law requires North Carolina's three utility companies to meet 12.5% of their annual electricity output with renewable energy by 2021. The bill requires the utilities to meet specific benchmarks in earlier years beginning in 2010.

Senate Bill 3 also provides the Environmental Management Commission (EMC) with the authority to evaluate renewable energy technologies and establish environmental standards where existing regulatory programs are insufficiently protective.

Pursuant to this authority the EMC has been evaluating the potential impacts of biopower facilities that generate electricity through the process of burning woody biomass<sup>1</sup>. Biopower from woody biomass is typically generated one of two ways. First, a facility can directly burn wood to generate steam to drive a turbine. The second method, co-firing, involves using wood in place of a portion of the coal burned in conventional coal-fired power plants. Biopower facilities have a number of potential environmental impacts ranging from air quality emissions to increased pressure for more intensive harvesting on the state's forestlands.

The scope of this report is limited; it does not address all potential environmental, public health, and cultural concerns that arise from woody biomass combustion facilities. The report focuses on potential natural resource impacts that would likely arise from increased harvesting, changes in harvesting practices, and land use conversions to meet a growing demand for wood to serve the new state-created market for biopower. Additional recommendations may follow as more data becomes available concerning other potential impacts.

The EMC's evaluation of woody biomass facilities and their potential environmental and natural resource impacts was guided by a Technical Advisory Group (TAG). The TAG was comprised of representatives from the forest products industry, utility company representatives, state natural resource agency officials, environmental advocates and academics from North Carolina State University. The TAG reached general agreement that the creation of demand by the mandates of Senate Bill 3, particularly in combination with the demand for biomass from the biofuels goals, could have a significant impact on the market for woody biomass in the state.

At the same time it is important to understand that the degree and type of environmental impacts will be significantly affected by what is included within the categorization of eligible

---

<sup>1</sup> Woody biomass generally refers to the tops, limbs and other residuals that are left on the forest floor following a traditional harvest for timber. The usage of the term in this report, given the uncertainty of the North Carolina statutory definition of "biomass," may have a broader meaning.

woody biomass. It was generally acknowledged that due to the lack of data and insufficient experience with similar scenarios, it is difficult to project with a high degree of certainty that the types and degrees of environmental impacts that can be expected. Nevertheless, the EMC has concluded that, without proper protections, significant impacts are possible in the areas of land use (e.g. conversion of old growth forest to plantation), soil nutrient deterioration, water quality degradation, destruction of wildlife habitat, ecosystem disruption, air quality and ash deposition.

The EMC also identified key policy issues that will have a direct impact on the future growth of the woody biomass market; in some cases those issues were outside the EMC's statutory charge but were identified because of their significance to the development of this market as well as to the potential for environmental harm.

The work of the EMC revealed a number of uncertainties in this policy arena that need to be addressed. For example, under the current regulatory scheme there are differing interpretations of the definition of "biomass resources." In its most basic form, the policy decision at issue is whether the General Assembly, with the passage of Senate Bill 3, intended for the harvesting of whole trees solely for the purposes of electricity generation. If the definition of biomass is intended to encompass whole trees, as previously noted, the potential for landscape level impacts are increased.

Under the current regulatory scheme, the North Carolina Utilities Commission is determining on a case-by-case basis what constitutes eligible biomass and to date appears to be interpreting the definition of biomass resource broadly. However, the specific issue of whether burning whole trees harvested for electricity generation constitutes eligible biomass has not been considered by the Utilities Commission.

This process has led the EMC to identify several policy issues that are important to this emerging industry<sup>2</sup> and that need to be addressed prior to significant growth in the woody biomass sector to ensure protection of the state's natural resources. The findings and corresponding recommendations identified in this report are listed below:

---

<sup>2</sup> Two applications for new wood-burning biopower facilities have been filed with the North Carolina Utilities Commission. One in Hertford County and the other in Nash County.

## Environmental and Natural Resource Impacts

- **Finding:** *The use of woody biomass for energy production has a broad range of potential impacts that, without adequate safeguards, could be harmful for the environment, public health and culture of the State.*
- **Recommendation:** The EMC should continue to study and analyze the environmental ramifications of the broader utilization of woody biomass and should develop guidelines and regulations necessary to minimize harmful impacts on North Carolina's natural resources.

## Definition of Biomass

- **Finding:** *The 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 could allow for an ad hoc application of a broad definition without adequate environmental safeguards.*
- **Recommendation:** The General Assembly should clarify the definition of "renewable energy resource" in relation to woody biomass. A broad definition that allows the use of whole trees harvested for electricity generation should be adopted only in conjunction with sustainable management requirements. Such requirements should mandate that to be eligible for credit under the RPS mandates, woody biomass must be harvested in accordance with standards and practices that are protective of continuing forest productivity, ecosystem health, soil quality, water quality and biodiversity conservation.

## Sustainable Management

- **Findings:** *1) There are currently no standards or guidelines that require the sustainable management of the utilization of woody biomass. Sustainability refers to continuing forest productivity as well as to ecosystem protection, water and air quality protection, and biodiversity protection. 2) The state created market for biopower will create pressure on the sustainable use of our forest resources, and therefore must be guided and monitored to avoid adverse impacts.*
- **Recommendations:** *1) The General Assembly should require the adoption of forest management guidelines or adoption of third party sustainability standards by power generators and biofuel producers for these state created markets. Such guidelines will*

require that forest management plans adopted by the power and fuel generators will be protective of forest productivity, wildlife habitat, riparian buffers and other sensitive areas. Further, suppliers shall be required to certify that harvests were conducted in accordance with the requirements of the forest management plans.

2) The General Assembly should support ongoing studies related to the impacts from the harvest of forest residuals on wildlife habitat, water quality, soil conservation and forest health, as well as the quantity and value of the ecosystem services, and direct the development of harvest guidelines as appropriate.

#### **Forest Productivity**

- ***Finding:** Current funding sources for forestry and landowner incentive programs may be inadequate to encourage increased productivity of the state's forestlands needed to supply feedstocks for biopower and biofuels.*
- **Recommendations:** 1) The General Assembly should enhance existing programs and explore new programs that promote increased forest productivity. 2) The General Assembly should explore new sources of revenue for such programs, such as extending the current forest product assessment to all wood harvested.

#### **Application to Biofuels**

- ***Finding:** Under current law, any environmental standards or regulations adopted by the EMC for woody biomass utilization for biopower purposes would not apply to woody biomass utilization for the purposes of making biofuels. As a result, there is the potential for an unlevel playing field as these two emerging industries compete over limited feedstocks.*
- **Recommendation:** The General Assembly should require that any rules or standards that are developed for woody biomass utilization for power generation are equally applicable to utilization for biofuels.

#### **Monitoring and Data Collection**

- ***Finding:** Current data collection is inadequate to inform state policy makers and regulators of the impact of biomass harvesting. New technologies can facilitate better data collection without unreasonable expense to harvesters and power generators.*
- **Recommendation:** The General Assembly should provide resources for data collection and monitoring efforts to better inform policy development related to woody biomass facilities.



## Ongoing Assessment

- **Finding:** *Oversight of the impacts of the woody biomass market is currently spread across a number of state entities and agencies, such as the Utilities Commission, the Environmental Management Commission, the Wildlife Resources Commission, the Division of Forest Resources and the Energy Policy Council.*
- **Recommendation:** **The General Assembly should direct the formation of an inter-agency task force charged with the oversight of the growth of the woody biomass market in North Carolina. The task force should be required to periodically provide updates to the appropriate legislative committees.**

North Carolina's woody biomass feedstocks are a valuable renewable resource and are critical to meeting the renewable energy goals in Senate Bill 3. The state has an opportunity to ensure that emerging biomass markets protect and enhance natural resources, provide increased revenue for landowners and provide jobs in rural communities. To capitalize on that opportunity, the state must provide clear and definitive policies that will allow the market to function without undue environmental impacts.

## Background

Session law 2007-397, more commonly referred to as Senate Bill 3, created a renewable energy and energy efficiency portfolio standard for North Carolina. The purposes of the portfolio standard as outlined in the session law are to diversify energy resources, encourage private investment in renewable energy and improve air quality.

Outside of the legislatively required specific "set-asides" for solar energy, swine and poultry wastes, Senate Bill 3 provides the utilities with the flexibility to meet the renewable energy benchmarks without mandating a specific mix. A 2006 report prepared for the North Carolina Utilities Commission stated that biomass resources (wood and agricultural waste) would likely be the biggest contributor to renewable energy generation in North Carolina. Consequently, the development of the woody biomass market is critical to the success of the overall renewable energy market in North Carolina.

Included in Senate bill 3 was a provision directing the EMC to evaluate renewable energy technologies. The statutory language reads as follows:

The Commission may establish a procedure for evaluating renewable energy technologies that are, or are proposed to be, employed as part of a renewable energy

facility, as defined in G.S. 62-133.7; establish standards to ensure that renewable energy technologies do not harm the environment, natural resources, cultural resources, or public health, safety or welfare of the State; and, to the extent that there is not an environmental regulatory program, establish an environmental regulatory program to establish these standards.

*Following the passage of Senate Bill 3, the EMC established a Renewable Energy Committee (Committee) for the purposes of evaluating and identifying whether appropriate regulatory programs for renewable energy facilities are in place.*

In late 2008 and early 2009 the Committee focused on developing a regulatory framework for a wind permitting program. This work culminated in the delivery of a report and recommendations for legislation to the General Assembly in March 2009.

Following its work on wind, the Committee turned its attention to the potential environmental impacts of woody biomass facilities. Since its inception the Committee has acknowledged that all renewable power generating sources, including solar, wind and woody biomass, will have some adverse environmental impacts. For example, solar farms may have land use impacts, while wind farms raise viewshed concerns and could potentially harm birds and bats, among other adverse impacts. Recognizing that some type of impacts are inherent with energy generation, the Committee's efforts have been guided both by recognition of the environmental benefits of the utilization of renewable energy resources and by the need to limit and manage any potential adverse environmental and natural resource impacts from these facilities.

It was within this context that the Committee undertook an evaluation of the potential environmental and natural resource impacts of biomass facilities fueled by woody biomass. The use of woody biomass for energy production has a broad range of potential environmental, health and cultural impacts. These include, without limitation: land use (land in forest and forest type) water quality; air quality; soil conservation; wildlife habitat; biodiversity; atmospheric carbon; scenic; and ash deposition.

The Committee's work assumed existing air regulations were sufficiently protective of air emissions, although air quality issues were discussed to a limited degree during the Committee's deliberations of woody biomass facilities. For example, the Committee was presented information related to the issue of whether the federal Clean Air Act rules regulating commercial and industrial solid waste incinerators (CISWI) apply to combustion units using untreated wood as fuel. Application of the incinerator rules to woody biomass combustion would require more stringent air quality controls and could limit use of woody biomass for

biopower purposes. DENR, in consultation with the NC Attorney General's Office, determined that woody debris harvested after completion of logging or land-clearing activity and transported or stored for use as a fuel is not a solid waste. Consequently, the combustion of this material would not require compliance with incinerator rules (*See Appendix I*).

Furthermore, just as the legislative committees heard reports from the Division of Air Quality during its deliberations on Senate Bill 3, the Committee heard the same reports on the emissions of wood fired plants. Counter to the stated goals of Senate Bill 3, those reports indicate that a wood burning facility will have higher emissions than a new state-of-the-art coal plant for some pollutants, including particulate matter and Nitrogen oxide. Although woody biomass is a renewable resource, combustion of woody biomass does generate greenhouse gas emissions, but to a lesser extent in comparison to a coal burning facility.

The majority of the Committee's review of woody biomass facilities focused on those sets of environmental impacts that would likely arise from increased harvesting, changes in harvesting practices and land use conversions to meet a growing demand for feedstocks given the new state created market for biopower.

#### **Woody Biomass Technical Advisory Group**

With the assistance of the North Carolina State University Solar Center the Committee convened a Woody Biomass Technical Advisory Group (TAG) to provide assistance to the Committee in the deliberation of these matters. The TAG consisted of representatives from the forest products industry, utility company representatives, state natural resource agency officials, environmental advocates and academics from North Carolina State University. (*For a full listing of TAG members see Appendix II*)

The TAG was charged with providing technical data as well as identifying policy matters for consideration by the Committee. During the course of four meetings held over several months the TAG heard presentations from the NC State School of Forestry, NC Division of Forest Resources, NC State Forestry Extension, and others. The TAG evaluated existing forestry regulations and potential economic changes to the woody biomass markets. The TAG also received information on laws and regulations from other state's governing the utilization of biomass (*See Appendix III, Memorandum on State Policy Options*). TAG members were invited to submit specific policy recommendations for the Committee's consideration (*A copy of submitted comments can be found in Appendix IV*)

### Overview of the TAG Discussion Points

Below is a list of a few of the major discussion points identified during the TAG proceedings (it should be noted that the issues listed in no way reflect the views of all TAG members):

- The current definition of renewable energy resource in Senate Bill 3 provides for varying interpretations.
- The combined demand for power generation and biofuel production likely could not be met with wood waste or wood residuals alone.
- The new woody biomass market created by Senate Bill 3 has the potential to significantly increase demand for harvested wood, including increased harvesting specifically for woody biomass.
- Increased harvesting could lead to pressure to convert natural forests to plantations.
- Through more intensive forest management practices, and funding and education regarding the same, the existing average productivity of forests in this state could be increased in multiples.

### Existing Forestry Regulations

The TAG reviewed the current regulatory framework for forestry operations. North Carolina has mandatory forest practice guidelines (FPGs) related to water quality which are defined by the Administrative Code (15A NCAC 01I .0100-.0209). All forestry activities must comply with the FPGs to remain exempt from the permitting and other requirements in the North Carolina Sedimentation and Pollution Control Act. Best Management Practices are the methods or practices that can be implemented to stay in compliance with the FPGs.

North Carolina has no requirement that a forest owner have a forest management or harvest plan, nor is there a requirement for pre-harvest or post-harvest notification or reporting. North Carolina does not have restrictions, except in limited circumstances, on harvesting from sensitive areas, such as old growth forests, riparian buffers or wetlands.

## **Policy Decisions**

The EMC has identified below several major policy decisions that need to be addressed to ensure that the woody biomass market develops and does so in a sustainable manner for the long term benefit of the state.

### **Issue: Environmental and Natural Resource Impacts**

As noted above the degree and type of environmental and natural resource impacts will be significantly affected by what is included within the categorization of eligible woody biomass. The areas of these impacts could include land use changes; water, air and soil quality; wildlife habitat; biodiversity; accumulation of atmospheric carbon; scenic changes; and ash deposition and disposal. While the burning of woody biomass to generate electricity has the advantage, like coal, of being usable for base load, its potential unfavorable environmental impacts are greater than other renewable resources such as wind and solar.

In particular the EMC evaluation has concluded that there will be increased harvesting, including more harvests specifically for biomass. Such harvests have some greater intensity of clearing than do harvests without a biomass component, with implications for water quality, soil conservation and wildlife habitat. There will also be pressure to convert natural forest to plantation. Conversion could include conversion not only to forest plantation but also to other forms of "energy crops."

*Finding: The use of woody biomass for energy production has a broad range of potential impacts that, without adequate safeguards, could be harmful for the environment, public health and culture of the State.*

**Recommendation:** The EMC should continue to study and analyze the environmental ramifications of the broader utilization of woody biomass and should develop guidelines and regulations necessary to minimize harmful impacts on North Carolina's natural resources.

### **Issue: Definition of Biomass**

Senate Bill 3 defines, in part, "renewable energy resource" as 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 (emphasis added).

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. The resolution of this issue is a critical policy decision when viewed in the context of recent data from N.C. State which illustrates that the amount of wood residuals or "wood waste" will likely be insufficient to meet both biopower and biofuels goals.

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. The North Carolina Forestry Association supports this broad interpretation and submitted comments to the Committee stating such. In the TAG meetings representatives of the utility companies have also expressed their position that this is their favored interpretation and have questioned whether the Senate Bill 3 mandates can be met with a more restrictive definition (*See Appendix IV comments from Duke Energy Carolinas et al*).

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. Comments were submitted to the Committee by the Southern Environmental Law Center in support of this interpretation. Furthermore, the current statute does not define wood waste. It is imperative from a policy perspective to include some further legislative guidance and clarification of the meaning of the phrase "wood waste."

The current regulatory framework in place would resolve these differing interpretations at the NC Utilities Commission. The Utilities Commission in its rulemaking for Senate Bill 3 chose not to further define the biomass resource, but rather stated it should be a case by case decision. The Commission concluded that "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."

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 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." The Commission's order indicates that it will interpret the definition of biomass resource very broadly.

The potential environmental impacts of this industry are very significantly affected by the resolution of this definitional issue. Therefore, to enhance the growth of this industry and to ensure strong environmental safeguards are in place, it is imperative that the state clearly and definitively establish what constitutes "eligible biomass" for purposes under Senate Bill 3.

*Finding:*

*The differing interpretations of the statutory definition of "renewable energy resource" as applicable to "biomass" result in uncertainty concerning the types of biomass resources eligible under the Renewable Portfolio Standard, and could allow for an ad hoc application of a broad definition without adequate environmental safeguards.*

**Recommendation:**

**The General Assembly should clarify the definition of "renewable energy resource" in relation to woody biomass. A broad definition that allows the use of whole trees harvested for electricity generation should be adopted only in conjunction with sustainable management requirements. Such requirements should mandate that to be eligible for credit under the RPS mandates, woody biomass must be harvested in accordance with standards and practices that are protective of continuing forest productivity, ecosystem health, soil quality, water quality and biodiversity conservation.**

**Issue: Sustainable Management**

Placing a sustainability requirement on power generators or landowners conducting biomass harvests is a policy already in place in other states. The suggestion for such a requirement is grounded on the recognition that the new market for woody biomass created by the legislative mandates could have far-reaching, but currently unforeseeable impacts. A sustainability requirement could take several forms. One form would require a power generator to develop its own forest management plan and certify that its suppliers of woody biomass are meeting the requirements of the plan. Such a plan could require management practices designed to conserve biological diversity and forest productivity and health, and potentially protect higher value forests and lands.

Some states have addressed the potential for increased harvesting or changes in harvesting practices through the development of harvesting guidelines specifically developed for the harvesting of woody biomass. In most cases these guidelines are voluntary and address such issues as wildlife and biodiversity, water quality and soil productivity.

Other policy actions, such as restricting harvesting of biomass from riparian buffers or a specific type of wetlands, would be another step for the legislature to take that could ensure increased biomass harvests do not lead to degradation of water quality. Furthermore, some states in an attempt to stop conversion of old growth forests to energy plantations have chosen to exclude any wood from an old growth forest as an eligible biomass for purposes of their state's Renewable Energy Portfolio Standard.

*Findings:*

*There are currently no standards or guidelines that require the sustainable management of the utilization of woody biomass. Sustainability refers to continuing forest productivity as well as to ecosystem protection, water and air quality protection, and biodiversity protection.*

*The state created market for biopower will create pressure on the sustainable use of our forest resources, and therefore must be guided and monitored to avoid adverse impacts.*

**Recommendations:**

**The General Assembly should require the adoption of forest management guidelines or adoption of third party sustainability standards by power generators and biofuel producers for these state created markets. Such guidelines will require that forest management plans adopted by the power and fuel generators will be protective of forest productivity, wildlife habitat, riparian buffers and other sensitive areas. Further, suppliers shall be required to certify that harvests were conducted in accordance with the requirements of the forest management plans.**

**The General Assembly should support ongoing studies related to the impacts from the harvest of forest residuals on wildlife habitat, water quality, soil conservation and forest health, as well as the quantity and value of the ecosystem services, and direct the development of harvest guidelines as appropriate.**



**Issue: Forest Productivity**

Due to the pending resource demands placed on the state's forests from the biopower and biofuels programs, there is a need to develop a statewide effort to increase the productivity of existing forests. The Committee identified the potential for increasing the productivity of our state's forestland through increased cost-share or other incentive programs with landowners.

One potential funding source for increasing incentive programs could include a more equitable forest product assessment. Under the current Forest Product Assessment Act, not all wood processed in North Carolina is being taxed in the same manner, including wood moving out of state or overseas. This disproportionately hurts in state processors and limits the revenue available for incentive programs.

***Finding:***

*Current funding sources for forestry and landowner incentive programs may be inadequate to encourage increased productivity of the state's forestlands needed to supply feedstocks for biopower and biofuels.*

**Recommendations:**

**The General Assembly should enhance existing programs and explore new programs that promote increased forest productivity.**

**The General Assembly should explore new sources of revenue for such programs, such as extending the current forest product assessment to all wood harvested.**

**Issue: Application to Biofuels**

North Carolina has a goal that by 2017 10% of the liquid fuels sold in the state will be locally grown and produced. The goal equates roughly to 600 million gallons of biofuels per year and could create a significant demand for woody biomass as a feedstock for development of biofuels. Impact from the use of woody biomass for power generation cannot be assessed without also considering impacts from the prospective demand for woody biomass conversion to biofuels. Thus, the North Carolina Biofuels Center has been an active and helpful participant in these policy discussions from the outset and has submitted written comments in support of a comprehensive approach to this issue.

The development of standards on woody biomass harvesting for biopower purposes, while ignoring harvesting for the biofuels sector would create an unlevel playing field. The biofuels

sector like the biopower program is being driven by a legislatively established program. As such, it would logically follow that each should be subject to the same types of restrictions, if any are developed. During Committee discussion and the TAG deliberations there was no opposition expressed to the idea that any standards applicable to woody biomass for biopower should also apply to biofuels.

One way of addressing this needed change would be to amend the current EMC authority from Senate bill 3 (N.C.G.S. 143B-282(a)(6)) and broaden that authority to the biofuels sector.

***EMC Finding:***

*Under current law, any environmental standards or regulations adopted by the EMC for woody biomass utilization for biopower purposes would not apply to woody biomass utilization for the purposes of making biofuels. As a result, there is the potential for an unlevel playing field as these two emerging industries compete over limited feedstocks.*

**Recommendation:**

**The General Assembly should require that any rules or standards for woody biomass utilization for power generation are equally applicable to utilization for biofuels.**

**Issue: Monitoring and Data Collection**

One of the consensus items of discussions during the TAG meets centered on the importance of capturing and analyzing data to help inform the policy-making process. The TAG received comments from DENR's Division of Natural Resource Planning and Conservation suggesting relevant data types be collected, including:

- Geographic information documenting the location of biomass harvests and the extent of the acreage that provided the biomass;
- Source of the biomass harvest and whether the biomass harvest was paired with harvesting for other purposes; and
- Post-harvest land use and whether a native forest is being converted to an energy crop.

The Division of Forest Resources also compiled a summary of the current data collection efforts underway at the state and federal level. Some of the information collection efforts already in place include the Forest Best Management Practice (BMP) Implementation Survey and the Forest Inventory and Analysis Program. The Forest BMP Implementation Survey could

potentially be expanded to gather additional biomass related information. The survey work requires dedicated salary funding.

In addition, research studies being conducted by the NCSU Forestry Extension and the NCSU Department of Forestry and Environmental Services have the potential to help illuminate the potential impacts a growing biopower market may have on our state's farm and forest lands. The first of these studies is intended to develop a statewide inventory of available woody biomass, while the second study is focused on the impacts on wildlife from woody biomass harvesting.

***Finding:***

*Current data collection is inadequate to inform state policy makers and regulators of the impacts of biomass harvesting. New technologies can facilitate better data collection without unreasonable expense to harvesters and power generators.*

**Recommendation:**

**The General Assembly should provide resources for data collection and monitoring efforts to better inform policy development related to woody biomass facilities.**

**Issue: Ongoing Assessment**

Another point of consensus during the Committee's work on this issue was the understanding that the woody biomass market is dynamic. External factors, such as possible federal climate change legislation and changes in the European energy market, only add to the uncertainty. Consequently, it is difficult to predict the likely growth of the woody biomass market and biopower facilities.

This uncertainty could be addressed through the creation of some state level entity charged with identifying possible policy issues that need resolution. The range of issues evaluated by this new "Woody Biomass Stakeholder Group" could include: development of siting criteria; changes in land use practices linked to biopower facilities, such as conversion of natural forests or crop lands to energy plantations; and impacts to water quality; wildlife and biodiversity.

A subcommittee of the Energy Policy Council or some other appropriate entity could convene an ongoing working group to cover these topics, which extend beyond environmental concerns. Such a group could be formed with representatives from the EMC, the Wildlife Resources Commission, the Utilities Commission and the investor-owned utilities. Coordination of these

organizations will be critical to the woody biomass market and formalizing a collaborative process among them adds to the chances for the growth of this market. This work group could provide annual reports to back to the legislature and identify key policy issues.

*Finding:*

*Oversight of the impacts of the woody biomass market is currently spread across a number of state entities and agencies, such as the Utilities Commission, the Environmental Management Commission, the Wildlife Resources Commission, the Division of Forest Resources and the Energy Policy Council.*

**Recommendation:**

**The General Assembly should direct the formation of an inter-agency task force charged with the oversight of the growth of the woody biomass market in North Carolina. The task force should be required to periodically provide updates to the appropriate legislative committees.**

**Conclusion**

North Carolina is in a strong position to be leader in renewable energy development. While the implementation of Senate Bill 3 remains in its early stages, it is critical that the state establish and develop clear and consistent policies to maintain this leadership status. The EMC's evaluation of the woody biomass industry in North Carolina has identified a number of pressing issues that must be addressed. The threshold issue that the implementing agencies and other stakeholders need clarification on is the definitional aspect of "biomass resource." Until the uncertainty is removed, the growth of the woody biomass market may be limited. However, should this clarification result in the unequivocal inclusion of whole trees harvested for power generation, due to the significant impacts from harvesting whole trees for energy generation, the authority of the EMC to develop appropriate regulations or guidelines should be reaffirmed.

This report also identifies a number of policy actions that could be taken by the General Assembly. Taken as a whole these findings are intended to promote the renewable energy market, and specifically the woody biomass sector as well as protect the environment, while at the same time establishing environmental and natural resource standards that will guide and manage growth in that sector. The woody biomass sector has the potential to become an important component of our state's energy production in the future. Properly managed the woody biomass facilities and the harvesting of the feedstocks necessary to fuel those facilities

have the potential to add jobs in rural communities and at the same time enhance the state's natural resources.

This report is intended to further the adoption of policies that will guide the growth of the woody biomass market in a manner consistent with the environmental protection mandate contained in Senate Bill 3.

This report was approved by the Renewable Energy Committee on March 10, 2010 and by the full Environmental Management Commission on March 11, 2010.

The members of the Environmental Management Commission's Renewable Energy Committee are:

Mr. J. Dickson Phillips, III	Committee Chairman
Mr. Thomas F. Cecich	
Mr. Stan Crowe	
Mr. John S. Curry	
Ms. Marion Deerhake	
Mr. Tom Ellis	
Dr. Charles Peterson	
Mr. Stephen T. Smith	EMC Chairman

## APPENDIX I

### Memo on Applicability of Federal Incinerator Rules.



North Carolina Department of Environment and Natural Resources

Beverly Eaves Perdue, Governor

Dee Freeman, Secretary

August 31, 2009

Carolina Choi  
Director, Energy Policy and Strategy  
Progress Energy Service Company  
P.O. Box 1551-PEB 1505  
Raleigh N.C. 27602

George T. Everett  
Director, Environmental & Legislative Affairs  
Duke Energy Carolinas  
3700 Glenwood Avenue, Suite 330  
Raleigh, N.C. 27612

**Re: Biomass Combustion in Utility Boilers**

Caroline and George:

At Secretary Freeman's request, I am responding to your letter of August 18, 2009 asking for interpretive guidance on the applicability of federal Clean Air Act rules regulating commercial and industrial solid waste incinerators (CISWI) to combustion units using untreated wood and vegetative materials as fuel.

In June of 2007, the federal Court of Appeals for the District of Columbia Circuit struck down EPA rules that exempted a unit that combusted solid waste for purposes of thermal recovery from the CISWI rules. As a result of that ruling, any new unit that combusts solid waste must comply with the CISWI rules. The Clean Air Act references the definition of solid waste in the Solid Waste Disposal Act:

"...any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material including solid, liquid, semisolid or contained gaseous material resulting from industrial, commercial, mining and agricultural operations..."

Our staff and counsel representing the air quality and solid waste programs agree that woody debris and small timber that is harvested after completion of logging or land-clearing activity and transported or stored for use as a fuel is not a solid waste because the material has not been "discarded". The combustion of those fuels would not require compliance with the CISWI rules.

1601 Mail Service Center, Raleigh, North Carolina 27699-1601  
Phone: 919-733-4984 \ FAX: 919-715-3060 \ Internet: [www.enr.state.nc.us/ENR/](http://www.enr.state.nc.us/ENR/)

August 31, 2009

Page 2

(The same type of material would still constitute "solid waste" in circumstances where it has been discarded.)

We also recognize that there may be other types of clean, chemically unaltered wood and vegetative waste that could fall outside the definition of "solid waste". Making that determination, however, requires careful consideration of the nature of the material, its processing and handling. DENR has proposed to make determinations about application of the CISWI rules to other types of wood and vegetative waste, such as byproducts of manufacturing (including sawdust and wood chips), on a case by case basis. The Division of Air Quality will have the lead role in making those determinations, but will do so in consultation with the Division of Waste Management.

Staff in the Division of Air Quality and Division of Waste Management are still gathering information on torrefied wood to get a better understanding of the product. We will provide additional guidance on use of torrefied wood as soon as possible. I did not want to hold this response until we could fully address the question concerning torrefied wood because of Duke Energy's immediate need for guidance on use of wood waste from land-clearing activities.

I hope this is helpful as a start. As you know, EPA has issued a notice of proposed rulemaking to clarify the application of CISWI at the federal level. Until a federal rule becomes final, DENR proposes to use this case-by-case approach unless a particular type of material clearly falls outside the definition of solid waste.

Sincerely,

Robin W. Smith  
Assistant Secretary for Environment

Cc: Secretary Freeman  
Keith Overcash  
Dexter Matthews

One  
North Carolina  
*Naturally*



## **APPENDIX II**

### **Membership of Woody Biomass Technical Advisory Group**

## EMC Biomass Technical Advisory Group Members<sup>1</sup>

<b>Name</b>	<b>Organization</b>
Bob Abt	NC State University
Tracy Beer	Duke Energy
Grant Blume	Progress Energy
John Bonitz	Southern Alliance for Clean Energy
Steven Burke	NC Biofuels Center
Tom Cors	The Nature Conservancy
Garald Cottrell	Wellons Energy Solutions
Rosalie Day	NC Sustainable Energy Association
Doug Duncan	National Association of Professional Loggers
Robert Goodson	GreenCo Solutions Inc.
Rick Hamilton	NC State University
Dennis Hazel	NC State University
Chris Hopkins	NC State University
Will McDow	Environmental Defense Fund
Chris Moorman	NC State University
Barry New	NC Division of Forest Resources
Wib Owen	NC Division of Forest Resources
Linda Pearsall	NC Division of Natural Resources Planning and Conservation
Bob Slocum	NC Forestry Association
Stan Taylor	RST Engineering

<sup>1</sup> The Biomass Technical Advisory Group (TAG) was chaired by Environmental Management Commission member Dickson Phillips. The work of the TAG was made possible through the assistance of the NC State University Solar Center and specifically staff members, Alex Hobbs, Maureen Quinlan and Kim Tungate.

## **APPENDIX III**

### **Memo on State Policy Options**

**Memorandum**

To: Dickson Phillips

From: Steve Wall

Date: October 29, 2009

Re: Woody Biomass Policy Options

\*\*\*\*\*

Pursuant to Senate bill 3 (SB 3) the Environmental Management Commission is charged with evaluating renewable energy technologies and establishing standards to ensure that these technologies do not harm the environment, natural resources and cultural resources, or public health, safety or welfare of the State. In the last several months the EMC has focused its attention on the environmental impacts of utilizing woody biomass for energy. While there are air quality regulations currently in place that pertain to emissions from these biomass facilities, questions have been raised about the potential impacts to our state's forest and wildlife resources from woody biomass facilities. Consequently, the EMC must decide whether standards or regulatory actions should be put in place to limit any adverse impacts from the utilization of woody biomass for power generation.

What follows below are some potential options for consideration by the EMC based on actions in other states to address these same concerns. For some of the options it may require the EMC to recommend back to the legislature for statutory changes to SB 3.

**No action with a five year review**

This policy option would be based on the premise of taking no action other than a requirement that the EMC revisit this issue after more time has passed. This option would require a formal review by the EMC in five years. This assessment after a period of five years shall include updating the number of wood biomass burning facilities that are in operation, the portion of the SB3 requirements being achieved through woody biomass and a review of market prices of timber, pulpwood and wood residual. The assessment shall also note the extent to which the requirements of SB 3 have impacted the forest resources of the state, including conversions of forests to energy crops and identification of any potential "hot spots" or areas where biomass facilities have located in significant numbers.

The review shall also require the EMC to assess whether any regulatory or policy decisions are warranted based on the latest information. A requirement for a reassessment after a set time period would be consistent with prior EMC action, such as the mercury rules (15A NCAC 02D .2509) which require periodic reviews by the EMC.

### **Wood Waste definition**

Senate bill 3 states 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 (emphasis added) ...." While varying interpretations can be made of this definition, one such interpretation takes the position that biomass resources are not limited to wood waste but rather include the entire universe of biomass. The N.C. Utilities Commission in its rulemaking for SB 3 chose not to further define the biomass resource but rather stated it should be a case by case decision. The Commission concluded that "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 RuleR8-67."

Other states have chosen to more directly define what types of biomass will be allowed under their renewable energy portfolio requirements. For example, Washington State excludes wood from old growth forests in its definition of biomass. Maryland and New Jersey are other examples of states that exclude old growth timber from eligible biomass resources. The definition of biomass and wood waste has also been subject to congressional action in past legislation and is once again under discussion in the pending climate change legislation.

At the very least, policy makers should be aware that the current definition of biomass in SB 3 can be interpreted in a manner that would not restrict its implementation to wood "waste" or residuals and could lead to the use of whole trees for power generation.

### **Caps on Woody Biomass Utilization**

Limiting the amount of woody biomass combustion used to meet the RPS requirements is another option for consideration. This could be done by amending SB 3 to put a specific limit on the volume of biomass. For example, Virginia's statute establishing its voluntary RPS goal mandates that no more than 1.5 million tons of woody biomass may be used for RPS purposes. Enacting a limit could also be taken through a percentage limit. North Carolina chose to mandate specific set asides for solar, swine waste and poultry. It could take a similar approach of placing percentage limits on how much woody biomass could be relied upon to hit the SB 3 targets (For example: No more than 50% of the portfolio can be comprised of woody biomass).

### **Sustainability Requirements**

Placing a sustainability requirement on power generators is an idea that has arisen in other states as large bioenergy facilities have been proposed. These types of projects have created concerns about the impacts of these facilities on the forest resources and on efforts to reduce greenhouse gas emissions. The basic structure of a sustainability requirement lies in requiring a power generator to certify that its suppliers of biomass have some type of forest management or sustainability plan in place.

Massachusetts is currently in the process of developing a sustainability requirement. New York utilities regulations require that biomass facilities must have Forestry Management Plans. Suppliers of these facilities must be in compliance with the biomass facilities plans. The plans are required to contain management practices that conserve biological diversity, productive forest capacity and promote forest ecosystem health. The plans must be completed by a professional forester and are subject to state approval. The suppliers of the wood resource must then be in compliance with FMP and develop harvest plans for each parcel.

### **Harvesting Guidelines**

A number of states have developed guidelines for the harvesting of woody biomass. In most cases these guidelines are voluntary and are intended to assist landowners with ensuring that the amount of removal does not cause any unintended consequences. Guidelines developed in other states cover such issues as wildlife and biodiversity, water quality and soil productivity. Minnesota, Wisconsin and several other states have developed biomass harvesting guidelines. These guidelines are summarized in a Forest Guild report ([http://www.forestguild.org/publications/research/2009/biomass\\_guidelines.pdf](http://www.forestguild.org/publications/research/2009/biomass_guidelines.pdf)).

The removal of dead wood and the corresponding reduction of dead wood on site is one of the key distinctions between harvesting practices for forestry operations. While North Carolina has existing best management practices for forestry activities, the BMPs are focused solely on water quality. Additional guidelines for the harvesting of biomass that has traditionally been left on site may prove useful.

## **APPENDIX IV**

### **Comments Submitted by Technical Advisory Group Members**

- A. NC Forestry Association**
- B. NC Biofuels Center and Environmental Defense Fund**
- C. NC Division of Natural Resource Conservation and Planning**
- D. Southern Environmental Law Center**

## MEMORANDUM

To: EMC Renewable Energy Committee

From: Bob Slocum, Executive Vice President  
NC Forestry Association

Subject: **RECOMMENDATIONS REGARDING RENEWABLE WOODY BIOMASS**

Date: November 12, 2009

A technical advisory group (TAG) established by the EMC's Renewable Energy Committee has been meeting to discuss policy options and recommendations regarding woody biomass. While the group has not reached any final conclusions or made any policy recommendations, members of the TAG were asked to provide comments to members of the Renewable Energy Committee prior to the November 18<sup>th</sup> meeting.

The following comments and recommendations are offered on behalf of the NC Forestry Association, a private non-profit conservation organization representing some 4,000 forest landowners, managers, wood suppliers and manufacturers of wood and paper products in North Carolina.

### Definitions

**Recommendation:** The definition of renewable energy resource in Senate bill 3 must be clarified with regards to what a "biomass resource" means and includes. The NCFCA recommends that it be made clear that a biomass resource includes all forms of wood and does not restrict the potential supply.

### Discussion

In Senate bill 3, the bill that created NC's renewable power standard, the following definition was made of a "renewable energy resource:"

*(8) '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.*

Significant questions have surfaced over what "a biomass resource" means and/or includes. Some read the language *[including agricultural waste, animal waste, wood waste, spent pulping liquors, combustible residues, combustible liquids, combustible*



*gases, energy crops, or landfill methane*] to mean that only those items stated would be considered as a biomass resource. Under this interpretation, only wood waste (which is not defined) would be considered a "biomass resource" for the purpose of meeting the state's renewable power standard.

Others, including the NC Forestry Association, read this list as examples of a "biomass resource" and not an exclusive list of eligible materials. Under this view, all wood would be considered a biomass resource.

The NC Utilities Commission has stated that it will review this issue (what constitutes a biomass resource) on a "case by case" basis. This means that one facility might be allowed to use a broad range of wood resources while another could be restricted to using only "waste." We believe this alone is and will be a major deterrent to potential investors in biomass power. Thus, this definition must be clarified.

There is general agreement that if North Carolina is to meet the goals and mandates defined in Senate bill 3, wood will have to play a significant role in producing renewable power. Arbitrarily restricting the potential supply of woody biomass will make achievement of these goals and mandates almost impossible.

#### Other Policy Options

**Recommendations:** The NC Forestry Association recommends that no additional policy actions, beyond clarifying the above definition, be taken at this time and that the EMC revisit this issue at 5-year intervals.

#### Discussion

Despite much attention, fanfare and media coverage, the fact is that there has been no significant expansion of the use of wood for power generation in North Carolina. And most experts agree that it will take 3-5 years for any new facilities to come on line. While the major power utilities are exploring both co-firing at existing coal plants and building new biomass power capacity, no major expansions are expected in the near term.

Some have expressed concern over potential impacts to the existing forest products industry. We do not believe there will any significant adverse impact to this industry. The forest products industry in North Carolina is already the largest producer of renewable power in the state. This industry, like most manufacturing industries, is in a severe recession and a number of facilities have closed or are taking significant down time. For example, it was recently announced that the International Paper mill in Franklin, VA will be shut down. This was a major market for pulpwood in the northeastern part of North Carolina. The Domtar mill in Plymouth, NC is shutting down its last paper machine and converting to the production of fluff pulp. This means the mill will no longer use hardwood species in its production. Georgia Pacific has closed its mill in Ahoskie, NC and suspended operations at its Whiteville, NC mill for at least 6 months.

T&S Hardwoods in Sylva, NC closed its doors October 1<sup>st</sup>. This mill was the largest employer in Haywood County. Almost all other manufacturers are running at reduced levels.

The fact is that additional markets for wood are needed and we believe that biomass power, and eventually the production of liquid fuels, can provide new and much needed markets.

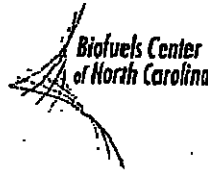
Some have expressed concern of potential impacts to our forests and suggested that new mandates, rules, or restrictions are needed. We disagree. "Biomass" is simply one of several forest products. And it is not new. We have been producing and using woody biomass for power generation for decades. We also believe that basic economics, certainly as they exist as this time, will mandate that biomass will be produced as part of an integrated harvesting operation, i.e. there will be very little harvesting solely for the production of biomass. We already have mandatory requirements for water quality protection that pertain to any land-disturbing activity for forestry. Almost all of our logging contractors are trained in best management practices and compliance rates for the mandatory performance standards for water quality exceed 90%.

Preliminary data from the new forest inventory and analysis work in North Carolina shows the following:

- Total forestland in North Carolina increased slightly;
- Forest growth per acre continues to increase;
- Our growth/drain ratio is positive for both hardwoods and softwoods (we are growing more than we are removing).
- Over half of NC's 18 million acres of forest land is in hardwood types and two-thirds of our timber volume is hardwood.

So the data does not indicate any problems in meeting demands for wood. What we do know is that the continued decline in markets will likely have an adverse impact on forest investments by private landowners that could lead to increased conversion of forestland to non-forest uses.

We do not believe that any additional mandates, requirements or restrictions are needed or are appropriate with regards to the production of woody biomass. We continue to support expanded landowner education and outreach regarding forestry and forest management options as well as the continued training of logging professionals in best management practices.



## *Envisioning North Carolina's Biomass Future*

*A Framework for Thought and Action*

*December 30, 2009*

### **I • OVERVIEW AND VISION**

North Carolina's biomass resources are abundant, diverse, and versatile. Carefully and sustainably managed, the resources can be increasingly valuable simultaneously to build the state's renewable energy economy, to enhance working lands, and to benefit the environment.

Emerging biomass markets offer significant potential to create and sustain new jobs and to reinvest in North Carolina a portion of the \$30 billion currently spent outside the state to import coal, oil and natural gas. Key goals for North Carolina should be to keep those jobs in-state, particularly enhancing rural communities, and to produce more home-grown energy that reduces greenhouse gas emissions. The benefits derived from achieving these goals should be disseminated to the broadest representation of communities, landowners and industries across North Carolina.

North Carolina has an opportunity to ensure that emerging biomass markets are not only sustainable, but actually improve the environment while providing new income and jobs for local communities. Visionary thinking, decisive and timely leadership, and clear analytics will be required to realize this vision; standard and long-established methodologies and thinking will probably prove insufficient.

Achieving the best possible future requires assessing supply and demand, addressing new and possibly unforeseen issues, and developing effective policies. Toward that end, this document reflects thoughtful consensus from two significantly attentive organizations about future biomass usage, policies, and outcomes – offering both a vision and a framework for approaches and policies between now and that future.

### **VISION**

The production and utilization of biomass resources must improve environment, communities and economy across North Carolina. Biomass resources will be defined and managed over time with effective policies and practices for ecologically and economically sustainable outcomes. Varied parties will work carefully together over coming months to achieve a shared vision.

## II · GUIDELINES FOR THOUGHT AND ACTION

### CORE PRINCIPLE

To be truly and responsibly sustainable, North Carolina's biomass future demands on-going commitment to a full suite of environmental, economic and societal imperatives.

### RESPONSIVE LEADERSHIP

The state must make three foundational commitments to achieve outcomes that enhance North Carolina's economy, citizens, and environment.

- **LEADERSHIP** North Carolina will demonstrate leadership in developing biomass markets with dovetailed and balanced attention to sustainability, economic benefits, jobs, sector needs, public benefits, and the environment.
- **PARTNERSHIP** Working together in coming years, varied parties in North Carolina will commit to such leadership and ensure it by behavior and activities from every vantage point.
- **RESPONSIVE** Expanding, emerging and unexpected factors – from climate impacts to altered landscapes and sector applications – will be necessarily and timely addressed by strategy and monitoring.

### POLICY CONSIDERATIONS

To ensure appropriate attention and future outcomes, North Carolina must:

- **MEETING DEMAND** Effectively and sustainably meet biomass demands from different sectors, including: existing industries, electric power generators, biofuels producers, and others at hand or to be shaped.
- **ANTICIPATING NEEDS** Employ comprehensive analysis, estimation, feedback, and monitoring to anticipate both increasing and new biomass needs – yielding few surprises and solid foundations for sustainable biomass utilization.
- **POLICIES AND STRATEGIES**  
Adopt policies and strategies in a timely and decisive way to appropriately allot and benefit from biomass, as needs and questions are new, unfolding, and barely explored.

Craft and implement a portfolio of effective policies, regulations, and laws, no more or less than required for good stewardship, leadership, and outcomes.

Develop and maintain policies and incentives for biomass energy production as one strategy to reduce imported fossil fuel demands and associated greenhouse gas emissions.

- **GOOD MANAGEMENT** Ensure that biomass resources and land are exceptionally well managed by every measure of productivity, sustainability, and responsibility.
- **MAXIMIZE BENEFITS** Ensure that biomass markets maximize and spread economic and environmental benefits across the broadest representation of communities, landowners, and industries, and that costs are equitably allocated.

### III • RECOMMENDATIONS FOR ACTION

Timely and decisive actions, combined with keen attention to emerging issues, are required to achieve the vision of a sustainable biomass industry that improves North Carolina's environment, communities and economy. All of the following recommendations are necessary steps that can and should be undertaken. The chronology and interrelationship of necessary actions over time will be determined by engaged partners.

- **BIOMASS DEFINITION** Define renewable biomass to include clean agricultural and forestry resources gained in accordance with sustainable biomass management guidelines.
- **SUSTAINABLE MANAGEMENT** Design and implement guidelines for sustainable management of biomass feedstocks as measured by water supply and quality, wildlife and biodiversity, soil quality and productivity, conservation of natural heritage sites and high-conservation value forests, improved forest management, and carbon balance.
- **STATE ENERGY POLICIES** Enable the fulfillment of North Carolina's renewable energy goals, including the REPS and the 10% biofuels strategy.
- **COMPREHENSIVE PROJECTION** Study and quantify the total amount of biomass needed to meet existing and future demand. The study should analyze biomass demand under conservative, probable and high yield and demand scenarios as well as the expected community or environmental tradeoffs associated with each demand scenario.

RECOMMENDATIONS FOR ACTION, contd.

- **COMPREHENSIVE ANALYSIS** Identify additional needs and fund critical biomass-related analysis at universities, state agencies and elsewhere to document and quantify biomass impacts and opportunities.
- **LANDOWNER INCENTIVES** Support existing and new agriculture and forestry cost-share and property tax programs (e.g., Forest Development Program, Present Use Value) to ensure sufficient biomass resources to meet growing demand.
- **FACILITY INCENTIVES** Support policies and fiscal incentives for modern and efficient biomass utilization facilities that reduce resource, energy, and water consumption, and that minimize water, air and greenhouse gas emissions.
- **LOCATING FUTURE FACILITIES** Develop effective mechanisms for appropriately scaling and locating new biomass utilization and collection facilities to minimize competition for limited resources and to minimize adverse community impacts.
- **AIR AND WATER** When developing new production processes and facilities, establish standards as needed to minimize adverse impacts to air and water.
- **FORWARD LOOKING COMMITTEE** Establish a *Consensus Committee for North Carolina's Biomass Future* to advance implementation of necessary actions and to resolve additional issues. This small and targeted group, representing appropriate and varied interests, will develop and submit a consensus approach for emerging and future needs, by the spring of 2011.
- **LOOK-BACK ASSESSMENT** Conduct a comprehensive review of biomass markets and policies within 3 to 5 years of implementation. The review should qualitatively and quantitatively assess impacts on: food, feed and fiber markets; jobs and local economies; fossil fuel and greenhouse gas reductions; water, wildlife and natural communities; air quality and human health; and local community well-being.



Jane B. Preyer  
Director, North Carolina and Southeast Office  
Environmental Defense Fund  
4000 Westchase Boulevard, Suite 510  
Raleigh, NC 27607  
Phone 919-881-2912  
Email [jpreyer@edf.org](mailto:jpreyer@edf.org)



W. Steven Burke  
President and CEO  
Biofuels Center of North Carolina  
901 Hillsboro Street, PO Box 1919  
Oxford, NC 27565  
Phone 919-693-3000  
Email [sburke@biofuelscenter.org](mailto:sburke@biofuelscenter.org)

DIVISION OF NATURAL RESOURCES  
PLANNING & CONSERVATION

January 5, 2010

MEMORANDUM

TO: Dickson Phillips  
CC: Steve Wall  
FROM: Linda Pearsall  
SUBJECT: Comments on Woody Biomass Policy Options

Thank you for the opportunity to provide comments on the October 29, 2009 Woody Biomass Options. I apologize that the comments are late, and hope you can still accept them. I also appreciate your willingness to accept comments from the diverse perspectives represented on the Technical Team. This is indeed a complex subject for which we have limited information to support informed decisions. Proceeding cautiously seems wise.

I have used the headings provided in your Oct. 29 document to organize my comments. If you would like the information provided in a different format, please let me know.

**No action with a five year review**

There is currently so much uncertainty about the potential ecological and market impacts resulting from SB 3. In addition to the data which you identify for consideration during a 5 year assessment, it would be extremely useful to have several specific types of data collected. These could include:

- **Geographic information** documenting the locations of biomass harvests. This information should be as specific as possible and could be at point of delivery to the purchaser of the biomass. In addition to the location, it will be useful to collect information on the extent of the acreage that provided the biomass.
- **Source of biomass harvest-** In order to assess the influence of a biomass harvests on current timber operations, it would also be useful to know if the biomass harvest results from a harvest strictly for biomass or if the harvest is paired with a harvest for roundwood or pulpwood, clearing for development or agriculture, a harvest following storm damage, or a thinning.
- **Post-harvest land use.** In order to assess the impact of harvests on the current and future extent of forests in North Carolina, it would be useful to know if the land is being returned to native forest or timber plantation, or if it is being converted to another land use such as development or establishment of an energy crop.

### Wood Waste definition/Sustainability Requirements

In order to have a sustainable biomass resource, wood harvested from wetlands or from riparian buffers should be specifically excluded as part of the definition of a renewable resource. This will reinforce the current voluntary compliance of DFR Best Management Practices; protect most of the rare forest lands that are in private ownership; and result in protection of riparian buffers and wetlands that provide significant water quality protection.

### Harvesting Guidelines

According to information presented to the committee, there is not a significant difference in the volume of dead wood left on sites that include a biomass harvest vs. sites that do not include a biomass harvest. Whether there is significant difference in the quality of the materials left on site from a wildlife habitat perspective was not addressed. As technology changes and the value of biomass increases, the amount of downed wood left on site could change significantly. I suggest that additional research into this issue is needed and that the issue should be examined more thoroughly in 5 years.

Thank you again for accepting the challenging task of leading this diverse group. If you have any questions or need additional information, please let me know.

LPP/lpp



# SOUTHERN ENVIRONMENTAL LAW CENTER

Telephone 919-967-1450

200 WEST FRANKLIN STREET, SUITE 330  
CHAPEL HILL, NC 27516-2559

Facsimile 919-929-9421

January 12, 2010

*Via Electronic Mail and U.S. Mail*

J. Dickson Phillips III  
Lewis Phillips Hinkle, PLLC  
P.O. Drawer 4825  
Chapel Hill, NC 27515

Re: "Wood waste" as a renewable energy resource in Senate Bill 3

Dear Mr. Phillips:

It is our understanding that a technical advisory group ("TAG") established by the Renewable Energy Committee of the Environmental Management Commission ("EMC") has been engaged in a discussion of policy options and recommendations regarding energy production from woody biomass, and that the Committee will be discussing woody biomass policy options at its next meeting. We offer the following comments for the Committee's consideration.

Senate Bill 3, which established North Carolina's renewable energy portfolio standard, authorizes the EMC to assess the potential environmental impacts of renewable energy resource use and to develop environmental standards through regulations if necessary to mitigate these impacts. It appears that there is some debate among members of the TAG regarding what forest or wood product related resources are included in the statute's definition of renewable energy resources. Because the scope of this definition will to a large extent determine the potential environmental impacts of compliance with the statute, we believe that it is important for the EMC to clarify the scope of this definition.

In Senate Bill 3, the legislature specifically defined the "renewable energy resources" that may be utilized to meet its requirements. The statute defines a "renewable energy resource" as, 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. . .*" N.C. Gen. Stat. § 62-133.7(a)(8) (emphasis added). In reading a statute, we must look first to the plain language. "Including" must be given its plain meaning in this context. *Univ. of N.C. at Chapel Hill v. Feinstein*, 161 N.C. App. 700, 704, 590 S.E.2d 401, 403 (2003) ("A fundamental rule of statutory interpretation requires the plain meaning of the statute to control its applicability"). The *Merriam-Webster Dictionary* defines "include" as "to take in or comprise as a part of a whole or group." A statute that lists specific items or categories is read to exclude what the General Assembly did not enumerate. *Morrison v. Sears, Roebuck & Co.*, 319 N.C. 298, 303, 354 S.E.2d 495, 498 (1987) ("the General

Assembly's inclusion of specific terms or categories implies the exclusion of others."); *Evans v. Diaz*, 333 N.C. 774, 779-780, 430 S.E.2d 244, 246-47 (1993) (construing statute with "exhaustive" list to exclude categories not listed). Here, the General Assembly's use of "including" following "biomass resource" limits "biomass resource" to those specific resources in the exhaustive list. Potential biomass resources from forest or wood products are thus limited to "wood waste." If the legislature had intended the specific list of biomass resources to be illustrative instead of exhaustive, it would have used the frequent statutory phrase "including, but not limited to."

That the legislature intended renewable biomass resources derived from forest or wood products to be limited to "wood waste" is reinforced by the canon of statutory construction *nositor a sociis*: the meaning of words may be enlarged or restrained by reference to the intent of the whole clause. In the list of biomass resources in the statute, "wood waste" is preceded and followed by "agricultural waste," "animal waste," "spent pulping liquors," and "combustible residues." N.C.G.S. § 62-133.7(a)(8). All these are byproducts of a primary industry or endeavor, consistent with the commonly understood meaning of "waste": "damaged, defective or superfluous material produced by a manufacturing process." *Merriam-Webster Dictionary*. It is noteworthy that the statute lists as "biomass resources" "energy crops" in addition to "agricultural waste." If the legislature had intended to include "forests" or "timber" or "wood products" as a renewable wood biomass resource, it would also have listed these more expansive terms instead of or in addition to "wood waste."

Since the statute limits renewable energy resources from forest or wood products to "wood waste," the EMC should develop an operative interpretation of the term "wood waste" to guide its assessment of the potential environmental impacts of this resource and its development of standards to mitigate those impacts. To be consistent with the statute, the definition must be limited to "waste" or "damaged, defective or superfluous materials" of the forest or wood product industry. In the forest industry, this could include slash from timber harvest and thinnings with no commercial pulp or timber value. In the wood products industry, this could include lumber and paper mill residues, furniture manufacturing residues, and other byproducts of primary wood products manufacturing. The definition must exclude harvesting of forests for the primary purpose of biomass feedstock, as this would not constitute "wood waste." We suggest the following definition of "wood waste" that is included as a renewable biomass resource in the statute:

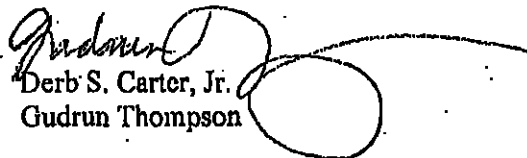
"Wood waste" that constitutes a renewable biomass energy resource means byproducts from timber management activities such as slash from harvesting or non-commercial thinning of timber stands; byproducts and residue from wood product industries such as sawdust, trimmings, and culled lumber; and finished wood products that would otherwise be discarded such as construction debris and used pallets.

Finally, we understand that there has been discussion among members of the TAG and others of a request to the legislature to clarify or expand the definition of "biomass resource." Regardless of the necessity or outcome of any such effort, it is clear that legislative action takes time. Meanwhile, renewable energy providers are likely poised to submit applications for

renewable energy facilities to the North Carolina Utilities Commission, which has stated its intent to determine on a case-by-case basis whether a resource used by a particular facility is a "renewable energy resource." Order Adopting Final Rules, Docket E-100, Sub 113 (Feb. 29, 2008). Because the scope of the definition of "wood waste" will impact the environmental consequences of renewable energy development, the EMC's establishment of an operative definition of wood waste would assist the Utilities Commission in its efforts to certify renewable energy facilities and help ensure that the environmental impacts of renewable energy development are properly taken into account.

Thank you for your consideration of these comments. If you have any questions or need additional information, please do not hesitate to contact either of us.

Sincerely,

  
Derb S. Carter, Jr.  
Gudrun Thompson

cc (via email):  
EMC Renewable Energy Committee  
Steve Wall

GT/kbd



GEORGE T. EVERETT, Ph.D.  
Director  
Environment and Legislative Affairs

Duke Energy Carolinas, LLC  
3700 Glenwood Avenue  
Suite 330  
Raleigh, NC 27612

919-235-0955  
704-906-5351 cell  
919-828-5240 fax  
gteverett@duke-energy.com

February 1, 2010

J. Dickson Phillips, III  
Lewis Phillips Hinkle, PLLC  
P.O. Box 4825  
Chapel Hill, NC 27515

**Re: Letter from the Southern Environmental Law Center ("SELC") regarding the definition of "biomass resource" under Senate Bill 3 (Session Law 2007-397) ("Senate Bill 3")**

Dear Mr. Phillips:

We the undersigned want to respond to the letter from the SELC to you, dated January 12, 2010, wherein the SELC offered comments and recommendations regarding its interpretation of the language of Senate Bill 3 and the intent of the legislation with respect to the definition of "biomass resource." Please accept this letter as an informal response to those comments for consideration by the Renewable Energy Committee ("the Committee") of the North Carolina Environmental Management Commission ("EMC"). Simply put, the SELC's comments and recommendations should be disregarded due to the flawed legal reasoning that serves as the foundation for SELC's recommendations. SELC's interpretation of the language of Senate Bill 3 defining "biomass resource" is both inaccurate as to the actual connotation of the word "including" and contrary to accepted legal standards of statutory construction. Importantly, SELC's proposed interpretation would severely limit the ability of our utilities and potential investors in biomass power production to use biomass resources to comply with the renewable energy requirements of Senate Bill 3 and further increase compliance costs for our 1.8 million North Carolina customers.

First, SELC cites the Merriam-Webster Dictionary definition of the word "includes", and yet ignores that actual meaning of the definition. As cited by SELC on page 1, "includes" means "to take in or comprise as *part* of a whole or group." (emphasis supplied). SELC somehow interprets this definition as suggesting that words or items that follow the word "includes" are not *part* of the whole or group, but actually *are the entirety* of the whole or group, to the exclusion of any and all others. 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 that those specified items are *part* of that whole or group. Thus, based on a plain reading of the dictionary definition of "include", the addition of the clause, "but not limited to" following "including" is not only unnecessary, but also redundant. To suggest, as SELC does, that the addition of "but not limited to" after "including" is determinative as to legislative intent, is simply wrong. It is our understanding that the North Carolina General Assembly has not used the phrase "but not limited to" after "including" in drafting legislation for over twenty years for this very reason.

Further, 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, it indicates that matters *other than those enumerated* are covered. See Norman J. Singer, 2A *Sutherland on Statutory Construction* 231-232 (2000)(emphasis supplied). Moreover, 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." As illustrated by the citation to *Sutherland on Statutory Construction* above, "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). It is also compelling that *in none of the cases cited and relied upon by SELC* (to establish that the list of biomass resources listed in Senate Bill 3 are intended to be exhaustive and exclusive) are the lists covered by those statutes actually preceded by the words, "include" or "including". As such, *Morrison v. Sears, Roebuck & Co.*, 319 N.C. 298, 303 (1987) and *Evans v. Diaz*, 333 N.C. 774, 779-780 (1993) are easily distinguishable from the statutory clause in Senate Bill 3 due to the fact that there is no qualifying language at all, let alone the word "including," that precedes the statutory language at issue in those cases.

Based on the above, the legal arguments underpinning SELC's position are inapposite and its comments as to how the EMC should read and interpret Senate Bill 3 should be ignored. Beyond the legal interpretation problems, SELC's arguments suggest a legislative intent behind Senate Bill 3 that is in direct opposition to our experience and understanding relating to the drafting and development of the law. Since the passage of Senate Bill 3, we have supported the expanded use of biomass as a key component of its North Carolina Renewable Energy and Energy Efficiency Portfolio Standards ("REPS") compliance portfolio. That compliance strategy has been based on an understanding that, consistent with the legislative intent of Senate Bill 3, "biomass resources" include a broad range of potential wood fuel inputs: such as biomass residuals, traditional forest products, and additional wood resources produced using advanced management techniques.

As a practical matter, the SELC's interpretation, if followed, would severely limit the ability of all electric power suppliers, to use woody biomass resources to comply with the goals and obligations under Senate Bill 3. In September 2009, officials from North Carolina State University presented a study entitled "Estimating Biomass Supply in the U.S. South" to the Biomass Technical Advisory Group to the EMC. The supply study assumed that logging residuals and roundwood trees of insufficient size or quality to meet the requirements of sawtimber (referred to as pulpwood), would be eligible to be used as biomass fuel. The supply study illustrated that even with increased collection of biomass residuals, these resources would represent only a portion of the biomass fuel resources necessary to meet the bioenergy demands of REPS<sup>1</sup>, and that the demand for woody biomass residuals, which SELC argues are the only wood products aside from energy crops that qualify as "biomass resources" under Senate Bill 3, will quickly exceed supply and availability in the marketplace. Forest2Market, a leading provider of market price and industry trend information for the forest, wood products and bioenergy industries, estimates that on average across the South (including the North Carolina

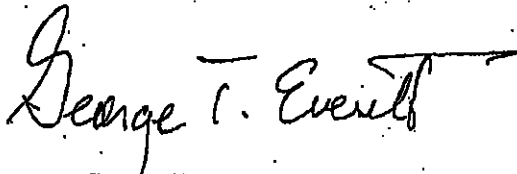
<sup>1</sup> The study assumed an aggressive escalation in the collection rate for in-woods biomass residuals, increasing from 10% for pine and 8% for hardwoods in 2012 to 66% for pine and 50% for hardwoods in 2025.

supply shed), approximately only 6% of all in-woods biomass residuals are currently recovered for utilization.

Residuals are certainly an important part of the fuel supply for woody biomass resources, but would be woefully inadequate to support the amount of biomass resources necessary to enable power suppliers to use biomass cost-effectively to meet its respective compliance obligations under REPS. Energy crops, including trees grown using advanced management techniques, are a potential biomass resource for the future, but they cannot be planted and harvested in quantities sufficient for the near term 2012 requirements. Thus, if the woody biomass fuel supply in North Carolina were restricted to residuals, the fuel supply for all woody biomass resources in the State would become dependent upon primary logging harvests and be subject to the fluctuations of a secondary, unregulated market. Due to the limitations on supply referenced above, the price of the available biomass fuel will inevitably increase with increasing demand. Further, the cost of woody biomass fuel is highly dependent upon transportation, so any additional restrictions upon fuel supply and sourcing areas will directly impact transportation costs. Taken together, the cost drivers will likely make woody biomass a much less attractive and cost-effective resource for REPS compliance purposes.

We thank the Committee and the EMC for its consideration of these comments in response to the SELC's letter.

Sincerely,



Jim Eck  
Vice President  
Business and Development  
Dominion North Carolina Power

George Everett  
Director  
Environmental and Legislative Affairs  
Duke Energy Carolinas

Roy Jones  
Senior Vice President  
Planning and Marketing  
ElectricCities

Robert Slocum, Jr.  
Executive Vice President  
North Carolina Forestry Association.

A. Preston Howard, Jr.  
President  
Manufacturers and Chemical Industry  
Council of North Carolina

Robert Schwentker, President  
Senior Vice President and General Counsel  
North Carolina Electric Membership  
Corporation

Caroline Choi  
Director  
Energy and Policy Strategy  
Progress Energy

## **APPENDIX V**

### **SUMMARY OF EXISTING FORESTRY INVENTORIES & DATA COLLECTION**



North Carolina  
Department of Environment and  
Natural Resources

Beverly Eaves Perdue, Governor  
Dee Freeman, Secretary



North Carolina  
Division of Forest Resources

Wib L. Owen, Director

February 18, 2010

To: Dickson Phillips, EMC  
From: Wib L. Owen *WLO*  
Cc: David Knight, Steve Wall  
Reference: Data Review Relevant to Biomass

As requested by the Environmental Management Commission's Technical Advisory Committee on using woody biomass for energy, the Division of Forest Resources has completed a review of current data collections and research underway that will be useful in monitoring an emerging woody biomass industry. Please accept the following as our response to your request.

North Carolina's climate, ownership patterns, forest productivity, and long history of timber production make it especially suitable for producing woody biomass. Reduced pulp and paper production capacity and large scale divestiture of forest industry lands to other owners in recent years also highlight North Carolina forests as significant potential sources of woody biomass for energy production.

Accompanying the potential to produce wood-based bio-energy from North Carolina forests are concerns and questions among some non-governmental organizations, existing forest products companies and public agencies about the long-term sustainability of our forest resources. Concerns and questions are specific to each entity, but taken together include a wide range of forest resource functions and values.

Some of these concerns and questions are:

- What is the definition of woody biomass?
- How much woody biomass is annually available for energy/fuel production?
- What will emerge from Congress and the White House as Federal Energy policy and how will this policy impact North Carolina economically, environmentally and with respect to our Renewable Energy Portfolio Standard?
- What impacts on North Carolina's forest resources will occur as a result of North Carolina's Renewable Energy Portfolio Standard, North Carolina Biofuels targets, European and other overseas markets, pellet fuel markets, and bio-energy markets in other states?
- Will dedicated wood energy/fuel crops emerge and have an environmental impact?
- What impact will a new biomass market have on traditional forest product markets?
- What local impacts will new woody biomass generating facilities have on traditional forest product markets, the sustainability of woody fuel and ecosystem (soil, water, air, wildlife, etc.) sustainability?
- What will be the landscape impacts of this new market?
- Will a biomass market result in the conversion of native stands of trees to plantations?
- Will forests be converted to agricultural land to produce energy fuel crops?
- Will agricultural land be converted to forest land to produce short rotation energy crops?

1616 Mail Service Center, Raleigh, North Carolina 27699-1616

Phone: 919 - 857-4801 \ FAX: 919 - 857-4802 \ Internet: [www.dfr.state.nc.us](http://www.dfr.state.nc.us)

AN EQUAL OPPORTUNITY \ AFFIRMATIVE ACTION EMPLOYER - 50% RECYCLED / 10% POST CONSUMER PAPER



- What new forest management approaches will emerge as a result of the new market?
- How accessible will timber and biomass be from North Carolina's changing forest ownerships?
- What will be the true environmental effects of an industry that is yet to fully materialize?

We need to ensure that we are collecting data and conducting research that will address these concerns and provide answers to these questions. Division of Forest Resources staff completed an evaluation of data that is currently being collected within the Division of Forest Resources and research that is being conducted by NC State University. The attached Current Data and Research document presents the results of this work. The document outlines data that are currently being collected and research that is currently being conducted relevant to the biomass discussion. In addition, the document also identifies places where additional data fields could be added to help inform biomass decisions. And finally, the document identifies resource needs that should be addressed to ensure that data collection proceeds uninterrupted for years to come.

The Current Data and Research document shows that a wealth of data is being collected with an opportunity to collect additional data that should allow us to monitor our resources and inform future decisions about the sustainability of these natural resources.

#### **Thoughts About How to Proceed**

Some key decisions need to be made that will shape the future of wood-based bio-energy usage in North Carolina and the resulting market for forest products. These decisions center on views by two opposing groups. One group wants new regulations on forest products harvested for biomass and a narrow definition of which woody products can be used for bio-energy production versus the other group that feels current rules and regulations are sufficient to protect our natural resources and asks for a broad definition of biomass. In reality, the issues are more complex than the views presented above but these two opposing group views do capture the big picture that must be addressed. On one hand, new regulations and a narrow definition of woody biomass will result in a reduction of woody biomass used for bio-energy production and the inability of this resource to contribute substantially to meeting the goals and targets for renewable energy production established in NC Senate Bill 3. On the other hand, allowing the usage of biomass to develop with current regulations and a broad definition of biomass runs the risk of unsustainable management of our natural resources. A look at the facts about current practices and projections concerning the bio-energy industry will help in analyzing these views and making key decisions.

Though the potential for a significant wood-based bio-energy industry in North Carolina is real, it is yet to emerge in a significant way region-wide. Several areas in North Carolina have been operating bio-energy facilities under current regulations and definitions without resource sustainability problems. Numerous evaluations of the new industry agree that biomass markets and utilization will grow slowly during the next five years. This could be referred to as the development period. We also know that biomass will be harvested using current timber harvest techniques and equipment during this development period. The Division of Forest Resources inspects 3,000 to 4,000 timber harvesting operations annually. These inspections represent the vast majority of timber harvests that occur on private lands in North Carolina annually. These inspections and additional data collected by the Division of Forest Resources confirm that Forest Practice Guidelines (FPGs) and Best Management Practices (BMPs) related to water quality currently provide good protection of our soil and water during timber

harvesting operations. Therefore, during this development period, we are confident that soil and water sustainability will not be an issue.

North Carolina currently has a significant amount of wood waste and residual wood that is not being utilized by current forest industry and could easily be brought to market with existing technology. In addition, Forest Inventory and Analysis data for North Carolina indicate that we are growing more wood than we are harvesting with respect to our current forest product markets. NC State University reports that more than eight million tons of forest biomass are sustainably available annually in North Carolina without using wood grown for traditional forest products. This is enough material to produce 600MW-years of power annually. As a result, we can be confident that our forest resources will not be strained during this development period.

Sustainable management of our forestland ensures a continuous supply of wood, soil and water quality, air quality, good wildlife habitats and recreational opportunities. A broad definition of biomass is more acceptable to stakeholders if sustainable management is ensured. Down and dead wood is an important component of wildlife habitat. Research at NC State University shows that there is not a significant difference in the volume of dead and downed wood remaining on timber harvest sites that include a biomass harvest versus timber harvest sites that do not include a biomass harvest. While additional research is needed and underway for evaluating the effect of biomass harvests on wildlife, we can be confident that during the development period the amount of down and dead wood remaining on site is not an issue. Concerns have been raised over conversion of natural stands to plantations, loss of biodiversity and subsequent loss of wildlife habitat. Current available data are adequate for monitoring sustainability of wood supply, soil and water and biodiversity. We need to evaluate data needs for monitoring wildlife and implement data collection and research to ensure we can track sustainability on this front. Ensuring sustainable management by landowners will also address resource sustainability concerns. Certification programs to ensure sustainability by landowners, such as the Sustainable Forest Initiative and the Forest Stewardship Council, are used by some large landowners in North Carolina but are too expensive for the vast majority of private landowners. The American Forest Foundation's American Tree Farm System Certification (ATFS) offers an affordable alternative for private landowners. For ATFS certification, landowners need a Tree Farm or Forest Stewardship Management Plan. These comprehensive plans include recommendations to manage not only for timber and trees but also for soil and water, wildlife and recreation. Only a very small percentage of North Carolina private landowners have Tree Farm or Forest Stewardship Management Plans. Current funding and policy are not adequate to significantly increase the number of Tree Farm and Forest Stewardship Management Plans to address sustainability. Work should begin immediately to increase funding and change policy during the biomass development period so that sustainability can be addressed while allowing for maximum utilization of our forest resources.

In summary, we are confident that during the next five years and possibly more, while the bio-energy industry is developing, current data collection and research will capture information that is needed to monitor our forest resources and inform our decisions about these new markets and their relationship to resource sustainability. In addition, we are confident that current rules and regulations will protect these resources during this development period and until significant changes occur in harvest techniques, market demand or new dedicated energy wood crops. Above all, we must ensure that all decisions are grounded in science and based on sound scientific principles.

Thank you for your leadership on this issue.

## **CURRENT DATA AND RESEARCH RELEVANT TO BIOMASS DISCUSSIONS**

### **Introduction**

The information presented in this paper is a brief synopsis of forest resource data currently collected by various sources that may be of interest to the Biomass Technical Advisory Group (TAG) of the NC Environmental Management Commission. Where applicable, a discussion of potential options for collecting additional data or conducting further analysis is offered as well as resource needs to ensure data collection. Additionally, two current research studies under the leadership of faculty in the Department of Forestry and Environmental Resources at NC State University that are of direct interest to the TAG are briefly summarized. This summary was compiled by the NC Division of Forest Resources in January, 2010.

### **North Carolina Division of Forest Resources**

#### ***A. Forestry Best Management Practice (BMP) Implementation Survey ["BMP Survey"]***

The BMP Survey is a detailed, site-specific evaluation to determine which forestry BMPs are being implemented on active logging jobs across the state. Due to the laborious work of these Surveys, they are conducted on cycles, allowing time to collect, analyze and report on the information collected during the field work. These surveys are distinct and completely separate from DFR's normal day-to-day water quality FPG site inspections.

The BMP Surveys conducted by the DFR follow a protocol that was jointly developed by the USDA-Forest Service and the Southern Group of State Foresters (SGSF), in an effort to standardize how each state in the southern region reports their respective BMP Implementation – the widespread adoption of this protocol and sharing of information between state forestry agencies is unprecedented in the U.S., with regards to the monitoring of BMP Implementation. The protocol also includes guidance on how to determine the sample size (ie: how many logging jobs to evaluate), in a manner that provides a statistically-founded survey sample. More information about the SGSF Water Resources Committee: [www.southernforests.org/water\\_committee.htm](http://www.southernforests.org/water_committee.htm). More information about the DFR's BMP Implementation Surveys: [http://dfr.nc.gov/water\\_quality/water\\_quality.htm](http://dfr.nc.gov/water_quality/water_quality.htm)

#### **How Data are Available**

Current: MS-Access database (with entries transcribed from paper forms.)

Future: MS-Access database (with entries made from hand-held electronic devices.)

#### **Frequency of Data Capture**

Periodic Cycles every 3 to 5 years. Next Cycle ("Round 3") to begin in 2010.

### **Current Status**

Round 1: Surveys taken on 565 sites from 2000 to 2003. Report is available from DFR.

Round 2: Surveys taken on 212 sites from 2006 to 2008. Data is being compiled for analysis, quality control, and reporting. Expect report to be completed in mid-2010.

Round 3: Targeting mid- to late-2010 to begin Round 3 with all-electronic data capture.

### **Biomass-Related Information Currently Available from BMP Surveys**

- Latitude/Longitude GPS point
- Estimated Harvest Size
- Type of Landowner
- Dominant Land Feature of the Site (wetland, flatwoods, mountains,... etc.)
- Forest Management Prior to Harvest (Intensive or passive)
- Timber Harvest Method (clearcut, thinning, select-cut, salvage,... etc.)
- Primary Tree Species Harvested
- Pre-harvest Plan Performed
- Technical Assistance Provided for the Harvest
- Logger Training Program Participant
- Average Width of SMZ (this parameter was not collected during the 2000-2003 Survey)
- Specific Information About SMZ Conditions (refer to excerpt of Survey form)

### **Additional Biomass-Related Information That Could Be Collected on Future Surveys**

- Landowner Name: Allows ability to cross-reference with other DFR databases.
- Type of Logging Equipment: Is a chipper/grinder being used? If 'yes', Is it combined with conventional logging equipment, or being used as a stand-alone operation?
- By-Product Utilization: If chips are being produced on-site, what are they being produced for?
- Area of SMZ: How much of the tract is contained within a SMZ?
- SMZ Timber Harvest: Is timber being harvested from the SMZ? If 'yes', we will need a metric to evaluate and report on: perhaps a % of total SMZ; or Basal Area retained in SMZ after harvest.
- SMZ Biomass Harvest: Is material harvested from the SMZ being used for biomass? (this would be a subjective response based on logger's input and evaluator's observations.)

### **BMP Survey Topics**

The topics that are evaluated in the North Carolina Forestry BMP Surveys include:

- General Information; Site Information; Forestry Operations
- Riparian Buffer Rule Applicability/Compliance
- Streamside Management Zones-SMZ
- Stream Temperature
- Debris Entering Stream
- Waste Entering Streams, Waterbodies or Groundwater

- Forest Access Roads
- Skid Trails
- Stream Crossings
- Access Road Entrances
- Rehabilitation of Project Site
- FPG Compliance

#### **Subjective Threat/Risk to Water Quality**

In addition to evaluating whether or not a specific BMP is implemented, there is an opportunity to identify whether or not a threat or risk to water quality is observed. As cited in the 2000-2003 Survey Report (page 5):

*"Conditions that posed a threat or risk to water quality prior to the tract naturally healing over time recorded a 'Yes' response. The surveyors considered the following six factors before making a 'Yes' response:*

1. *Sediment was delivered to stream/waterbody;*
2. *Sediment was likely to be delivered to stream/waterbody during a rainfall event ( $\leq 1"$  over 24 hours);*
3. *Sediment was delivered to stream/waterbody via wind gusts;*
4. *Adverse stream/waterbody temperatures were a result of harvest;*
5. *Logging debris and/or other logging byproducts were left in stream/waterbody;*
6. *Chemical or petroleum products had a high potential to reach stream/waterbody."*

#### **Structure of BMP Surveys**

During each BMP Survey cycle, the DFR's central office staff specifically trained select DFR personnel across the state to conduct these surveys, in an effort to keep the pool of evaluators relatively small and promote consistency among the survey results.

The BMP Surveys essentially follow along with the voluntary recommendations outlined in the forestry BMP manual, with the evaluator choosing a "yes" or "no" response to indicate whether or not each BMP was observed as being implemented on the logging job. A portion of the 2006-2008 BMP Survey form is provided as an example of the Survey structure and layout. The section excerpted here is for evaluating the activities that were conducted within the SMZs on the tract:

BMP: Streamside Management Zone (SMZ) Conditions	BMP PROPERLY IMPLEMENTED AND MAINTAINED			THREATS OR RISKS TO WATER QUALITY	
	Yes	No	N/A	Yes	No
Overall SMZ Width was adequate to provide effective sediment protection to waterbodies.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SMZ uniformly maintained along intermittent & perennial streams / waterbodies. (i.e. without large gaps)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Roads or trails minimized in SMZ.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trees were felled away from stream channel.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skidders and other equipment use was minimized in SMZ.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Forest floor / ground cover is adequately maintained - no more than 20% bare ground for perennial streams; 40% for intermittent streams.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No visible sediment from operations travelling through the SMZ and entering the stream.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Machinery kept out of SMZ in areas where ephemeral streams intersect intermittent / perennial waters.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Logging decks and/or sawmill sites located outside of SMZ.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When no other feasible option exists, logging decks and/or sawmill sites in SMZ $\geq$ 10 feet from stream/waterbody.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Total Responses for Streamside Management Zone (SMZ) Conditions					

#### DFR Resource Needs

- \$135,000 per year: Salary funding is time-limited, via grant funds through Spring 2011, for the DFR personnel (2 FTE's) that manage this Survey and other BMP projects. Dedicated salary funding is needed to support these 2 FTE's to assure continuity of surveys and BMP program delivery.
- \$ 35,000: The purchase of electronic hand-held devices and corresponding software to initiate paperless BMP Survey field data collection and storage has not yet occurred.
- \$ 4,000: Upon completion of the '06-'08 report, we wish to publish a limited number of copies.
- BMP Surveys will remain labor intensive. In spite of the planned efficiencies that DFR will implement in future Rounds of survey, including the use of hand-held data collection devices. Extensive travel across the state and per-diem is required. If a more rigorous sampling size or frequency of BMP surveys is desired, then additional DFR personnel, or a re-assignment of existing DFR personnel, would be required to maintain the desired intensity level of survey and reporting.

## **B. Forest Management Accomplishment Records and Reports (4220 database)**

County rangers assigned the responsibility of carrying out forest management activities, and foresters working in counties where county rangers are not assigned the responsibility of carrying out management activities are required to keep records of, and report forest management accomplishments. Forest management accomplishment records and reports are required in order to provide continuity of projects, summaries of accomplishments, and evaluation of the program.

Accomplishments consist of 192 forestry-related activities that are grouped into 12 categories.

Forest Management Accomplishment Categories	
<ul style="list-style-type: none"><li>• Management Plans</li><li>• Site Preparation</li><li>• Establishment</li><li>• Forest Protection</li><li>• Forest Practice Guidelines</li><li>• Stand Improvement</li></ul>	<ul style="list-style-type: none"><li>• Harvesting</li><li>• Other Resources</li><li>• Urban Forestry</li><li>• Best Management Practices</li><li>• Referral to Consultant</li><li>• Water Quality</li></ul>

Every accomplishment is linked to a landowner and tract of land. Landowner data includes basic demographic information including name and contact information, ownership information ( Private, Public, Forest Industry, Other ), private ownership information (Male, Female, Joint), and race (American Indian, Asian, Black, Hispanic, White). Tract information includes acreage, latitude and longitude, and identifies what river basin the tract is located within. Other accomplishment data includes cost share program data, species data, riparian acreage, and Southern Pine Beetle information.

### **Data Analysis and Collection Opportunities**

Create linkages between the 4220 database and other DFR information such as the BMP Survey database and the FPG Inspections database in order to better correlate and understand the impact of DFR forestry management services on FPG compliance and other measures of sustainability.

## **C. DFR Water Quality and Forest Management Information (FPG Inspections) and Biomass Harvesting**

Water Quality Foresters, County and District Division of Forest Resources personnel conduct inspections of timber harvesting operations, reforestation operations and miscellaneous activities annually. These inspections represent 3000 – 5000 visits to forestry sites each year. The following table represents data that are collected during water quality inspections and as a result of forest management exams. The "SOURCE" category indicates the hardcopy forms or electronic databases that are used to record this information. As you will notice only 3 types of information is recorded in all 7 of these sources. These are landowner name, latitude/longitude, and county. While we do often record information that can be

useful in answering some of the questions that have arisen concerning biomass harvesting, it is not found in one source and in fact is often located among several hardcopy forms that are in turn filed in separate landowner files.

INFORMATION COLLECTED	SOURCE (SEE FOOTNOTES)	COMMENT
Landowner Name	1,2,3,4,5,6,7	
Landowner Address	1,2,3,4,6	
Landowner Phone #	1,2,3,6	Sometimes obtained and recorded.
Latitude / Longitude	1,2,3,4,5,6,7	Lat/Long information is the standard for DFR. GIS shapefiles are only gathered consistently for Stewardship lands and significant fire polygons.
County	1,2,3,4,5,6,7	
DFR District	1,2,4,7	
River Basin	1,2,6,7	
Estimated Acreage	1,3,4,5,6,7	
Parties Involved with Harvest	1,2,7	Level of details can vary from tract to tract.
Active or Inactive Harvest	1,6,7	
FPG Compliance / Non-compliance	1,3,6,7	#7 is used for FPG non-compliance tracts only.
If non-compliance, which FPG standard not met	1,7	There are nine FPG standards.
Date FPG Compliance Complaint Received, Person Receiving Information, Source of Information, Situation Description, Type of Operation	1,6,7	If the site inspection originated from a complaint, this information is recorded. For #6, no details are logged, only that there was a complaint. For #7, only complaint date and source of complaint are logged.
If FPG non-compliance, date brought back into temporary or permanent compliance	2,7	
Riparian Buffer Rule Non-Compliance	1,3,6	
Referral for Enforcement Action Due to Continued FPG non-compliance	2,7	Referrals may be made to NC Division of Land Resources, NC Department of Agriculture, NC Division of Water Quality, or NC Division of Forest Resources, Law Enforcement
Estimated Days Since Harvest was Closed Out	1,3,6,7	
Person performing the exam	1,2,3,5,6	
Date of exam	1,2,3,5,7	
Recommended Activities	1,2,3,6	



Stand Description, Age & Growth Rate, Diameter Range, Hgt of Dominants, Site Index, Basal Area Range, Volume Range, Stand Quality, Midstory/Understory Description, Reproduction, Site Description	3	Details vary with type of exam being performed.
Tree Planting Accomplishments	5,6	
Species of tree planted	5,6	
Type of Cost-Share Applicant	4	Options are: Individual, Joint Owner, Corporation, Association
Cost-Share Practices Needed	4,6	
Actual Cost-Share Work Performed	4,5,6	For #5, site preparation work is recorded only when applicable.
Confirmed Acreage of Cost-Share Work Performed	4	

#1 Hardcopy - 4808-1, Site Evaluation / Compliance Notification

#2 Hardcopy - 4808-2, Site Re-Inspection / Compliance Notification. Only used after an FPG violation has been documented.

#3 Hardcopy - 4203-1A, NCDNR Field Data Sheet

#4 Hardcopy - 4910-1 & 4500-20, State Cost-Share Project Records

#5 Hardcopy - 4204-2, Tree Planting Quality Control Inspection

#6 4220 Database - NCDNR Forest Management and Urban Forestry Accomplishment Reporting and Planning Program

#7 4808 Database - NCDNR Forest Practices Guidelines Violation Tracking Program

There are additional pieces of information that personnel could potentially gather during the course of traditional work events that would help to inform biomass discussions.

#### Data Analysis and Collection Opportunities

DFR has developed a new Data Management Section that will have a charge of evaluating all of our current databases and analyzing data. Making sure these databases are compatible with interchangeable data and also compatible with our GIS is a priority. Data collection techniques, procedures and equipment will also be evaluated to ensure that all personnel and activities are operating as efficiently and effectively as possible.

#### DFR Resource Needs

2 FTE's to support a Data Management Branch head and Fire Environment data specialist.

Data logging equipment to facilitate collection and transfer of data.

## **USDA Forest Service**

### ***A. Southern Pulpwood Production Survey and Report***

An annual report that presents the findings of a 100-percent canvass of pulp mills that draw roundwood or wood residues from the 13 Southern States. Annual reports date back to 1953.

#### **Data collected in the survey include:**

- Company information (address, telephone numbers, email and web site information, contacts, location).
- Roundwood and chips from roundwood received by State/County and foreign sources.
- Plant byproducts received by origin (State).
- Use of bark (by percentage) for various purposes (*fiber products, charcoal or chemical wood, industrial fuel, mulch, miscellaneous uses including livestock bedding and mulch, other uses, not used*).
- Quantity of bark sold
- Quantity of in-woods chips used as boiler fuel

#### **Report findings for North Carolina include:**

- Total roundwood pulpwood production (softwood and hardwood)
- Total residue pulpwood production (softwood and roundwood)
- Roundwood pulpwood production by County (softwood and hardwood)
- Roundwood pulpwood movement between States (softwood and hardwood)
- North Carolina pulp mills by process and capacity

## **USDA Forest Service/North Carolina Division of Forest Resources**

### **A. Forest Inventory and Analysis Program**

The McSweeney-McNary Forest Research Act was passed in 1928 creating the first Forest Inventory and Analysis program conducted by the USDA Forest Service. The Forest and Rangeland Renewable Resources Research Act of 1978 replaced earlier legislation and this to was amended by the Agriculture Research, Extension, and Education Reform Act of 1998 (Farm Bill). Collection of forest inventory data in NC began in the 1930s when the first permanent forest inventory plots were established. The USDA Forest Service historically established and re-measured forest inventory plots in North Carolina on an approximate ten (10) year cycle. Known as the Forest Inventory Analysis (FIA) program, this periodic survey was a sort of forest "census" documenting and determining the status, trends, volume, availability, species, health, etc. of the many types of forests in North Carolina. The 1998 Farm Bill identified that our natural resources were changing at a faster pace than in the past and that the survey should be collected annually on a 5-7 year cycle. Field work for the first seven periodic surveys of NC were completed in 1938, 1956, 1964, 1974, 1985, 1990 and 2002. Field work for the eight survey (annual) was completed in 2008.

#### **Types of Data collected:**

<b><u>Land Attributes</u></b>	<b><u>Tree Attributes</u></b>
Condition Status	Tree Species
Reserved Status	Tree Status
Owner Group	Tree Class
Forest Type	Crown Class
Stand Size Class	Tree Grade
Regeneration Status	Tree Diameter
Tree Density	Tree Height
Owner Class	Standing Dead
Stand Age	Damages
Disturbance Type and Year	
Treatment Type and Year	
Physiographic Class	
Site Class	
Presence of Water/Snow	

### **Report findings for North Carolina include:**

- Historical Statistical reports from the USDA Forest Service.
  - Temporal changes in land use/forested acres.
  - Changes in Forest type/stand age/and species composition over time.
  - Many other comparisons of land and tree attributes.
- Interactive online data mining tool Forest Inventory Data Online (FIDO) (<http://fiatools.fs.fed.us/fido/index.html>) allows users to compare the above attributes from surveys completed in 1984, 1990, 2002, and 2007.
  - Land use trends, Acreage, Product Volumes, and Biomass can be calculated for each survey and can be quantified
  - Biomass volumes for forest land or timberland can be calculated for all live aboveground, merchantable, top and limb, sapling, stump, and below ground volumes along with standing dead and down woody material materials.
- EVALIDATOR (<http://fiatools.fs.fed.us/Evalidator401/tmattribute.jsp>) is an online tool by USDA Forest Service that allows you to populate tables with the above attributes and calculates sampling errors.
- The USDA Forest Service, Southern Research Station can also field specific request that are not readily available online.

### ***B. Timber Product Output Survey and Report***

This report contains the findings of a biennial canvass of all primary wood-using plants in North Carolina, and presents changes in product output and residue use. It complements the Forest Inventory and Analysis (FIA) inventory of volume and removals from the State's timberland. The survey is conducted to determine the amount and source of wood receipts and annual timber product drain, by county, and to determine interstate and cross-regional movement of industrial roundwood. Timber product output reports date back to 1964.

Only primary wood-using mills are surveyed. Primary mills are those that process roundwood in log or bolt form or as chipped roundwood. Examples of industrial roundwood products are saw logs, pulpwood, veneer logs, poles, and logs used for composite board products. Mills producing products from residues generated at primary and secondary processors were not canvassed. Trees chipped in the woods were included in the estimate of timber drain only if they were delivered to a primary domestic manufacturer.

### **Data collected in the survey include:**

- Company information (address, telephone numbers, email and web site information, contacts, location, type plant, products, mill status).
- Total quantity and type of raw material received
- Volume of product produced from logs received

- Receipts of logs on a percentage basis, by species group and origin (County level for NC, State level for out-of-state).
- Type of equipment in use at facility (including wood fired boilers)
- Disposal of mill residues by residue classification (*bark, coarse residues, fine residues*) and end use (*fiber products, particle board, charcoal or chemical wood, small dimension products, industrial fuel, mulch, miscellaneous, not used*).

**Report findings include:**

- Output of Industrial Timber Products (sawlogs, pulpwood, veneer logs, composite panels; other industrial products).
- Plant byproducts
- Total roundwood output (Source, ownership, species)
- Regional trends (mountain, Piedmont, Coastal Plain)
- TPO table maker website link

**C. NC Harvest and Utilization Study (2002)**

Report presents the findings from a harvest and utilization study conducted during the seventh inventory of North Carolina's forest resources completed in 2002. The study's main goal was to provide an estimate of softwood and hardwood volume used, and of volume left in the woods as logging residue. Survey crews sampled and measured trees harvested in a variety of logging operations, and analysts calculated wood volume and percent of utilization. Harvest volume data and factors for growing-stock and nongrowing-stock logging residues were described and interpreted.

**Data collected include:**

- Location (State, Survey Unit, County, Location)
- Stand origin (planted or natural)
- Tree Measurements (Species, Source, Diameter at breast height (DBH), Tree class, Product, bole and section lengths, cull, outside bark diameters)
- Types of logging equipment being used

**Report findings include:**

- Average DBH by product
- Average bole length by product
- Average residual stump height
- Average diameter (outside bark) at the end of utilization
- Disposition of harvest volume (utilized or not utilized) for softwoods and hardwood
- Source of non-utilized volume (growing stock or nongrowing stock) for softwoods and hardwoods
- Disposition of growing-stock volume (utilized or not utilized) for softwoods and hardwoods

## **NC Department of Revenue**

### ***A. NC Primary Forest Product Assessment Act and the NC Forest Development Program***

The Forest Development Act of 1977 provided for the establishment of a Forest Development Program (FDP) to:

- Provide financial assistance to eligible landowners to increase the productivity of privately owned forests of the State through the application of forest renewal practices.
- Insure that forest operations in the State are conducted in a manner designed to protect the soil, air, and water resources, including but not limited to streams, lakes and estuaries through actions of landowners on lands for which assistance is sought.
- Implement a program of voluntary landowner participation through the use of a forest development fund.

The forest development fund consists of assessments on primary forest products collected under Article 12 of Chapter 113A of the General Statutes (*Primary Forest Product Assessment Act*), General Fund appropriations, and gifts and grants made to the fund.

The assessment shall be levied against the processor of the primary forest product and shall be remitted to the Secretary, Department of Revenue on a quarterly basis. Primary forest products include those products of the tree after it is severed from the stump and cut to its first roundwood product for further conversion. These products include whole trees for chipping, whole tree logs, sawlogs, pulpwood, veneer bolts, posts, poles, and pilings.

Data submitted to the North Carolina Department of Revenue by primary processors includes company contact information and information on the quantity of primary forest products processed by product categories.

Under the Primary Forest Product Assessment Act, the production reports of the various processors shall be used only for assessment purposes and production information will not be made a part of the public record on an individual processor basis. Information available to the NC Division of Forest Resources is limited to a quarterly report of aggregate statewide total quantities of primary forest products severed by product category.

#### **Data Analysis and Collection Opportunities**

The Forestry Council, an 18 member advisory council appointed by the Governor, President Pro Tempore of the Senate and Speaker of the House, is evaluating the FDP and will make recommendations to DENR on how to address Biomass issues related to this program.

## **Research Studies**

### ***A. Sustainable Woody Biomass Resources for North Carolina***

**Lead Organization:** NCSU Forestry Extension

**Principal Partners:**

NCSU Cooperative Wood Products Extension, NCSU Department of Wood and Paper Science, NC Solar Center, Southern Forest Resource Assessment Consortium, NC Division of Forest Resources, Brooks Forest Products Center VPI & SU, NC Department of Commerce, Biofuels Center of North Carolina

**Justification:**

To develop sustainable woody-biomass based industries in North Carolina, a focused more formalized effort is needed to develop and maintain a reliable accounting of resource availability and use. Having readily available answers to these questions and engaged partners such as the Biofuels Center of North Carolina, Cooperative Extension Forestry at NC State University, and the NC Department of Commerce, the NC Solar Center, and the NC Division of Forest Resources will position North Carolina as a state where biobased energy can be sustainably produced and projects will have long-term viability and success.

Energy Independence, increasing costs of finite fossil fuels, climate change, and the need for economic development factors are driving the U.S. and North Carolina towards renewable energy, chief among them rural economic viability. In response, the state and Federal government have developed programs, incentives, and legislative requirements to promote technologies such as biofuels and power production. Other state and Federal action will continue to develop. The Biofuels Center of North Carolina mission is to develop a statewide biofuels industry to reduce the state's dependence on imported liquid fuels. In 2007, the General Assembly passed the Renewable Energy Portfolio Standard to promote renewable-generated electricity production, most of which will be based on woody biomass.

Although woody biomass is an abundant resource in North Carolina and the region, there is existing demand within the paper industry and forest products industry. Development and recruitment of sustainable woody biomass and biofuels requires answers to the following data projections from a state perspective and for specific proposed projects:

- Projected sustainable resource stocks statewide, by economic region and for a specific project
- Cost estimates for delivered feedstock (energy value, green and dry weights)
- Existing and projected use
- Long-term trends for supply, use, or cost

**Objectives:**

1. Develop and maintain a statewide data base of available woody biomass including, but not limited to:
  - Logging and land clearing residues,
  - Pulpwood
  - Financially non-productive (highgraded) woodlands
  - Secondary mill residues
  - Urban yard and storm waste
  - Clean industrial and retail wood waste
  - Agricultural residues
  - Purpose grown biofuel and biomass feedstocks
2. Develop and maintain a statewide database of existing and officially announced users of woody biomass including non-energy uses that utilize the same resource.
3. Integrate appropriate data layers and analytical tools to allow localized scenario-based analyses of impacts of possible projects.
4. Develop the capability with graphical interface of forecasting trends in resource availability and use and feedstock costs.

***B. Developing Research-based Biomass Harvesting Guidelines to Improve Sustainability of Harvesting Woody Biomass for Renewable Energy***

**Lead Organization:** NCSU Department of Forestry & Environmental Services

**Project Summary/Abstract:**

We propose an Integrated, Standard Project that addresses Priority 1 for the Managed Ecosystems Program with a focus on understanding, delivery, and implementation of sustainable woody biomass harvesting in agroecosystems. As the U.S. moves toward renewable-based energy, there will be enormous pressure to produce energy with woody biomass from forests. Forests provide a variety of ecosystem services; however, intensified resource extraction from forests may impact the balance of services. Biomass Harvesting Guidelines (BHG) may be used to protect, maintain, and enhance biodiversity, wildlife habitat, and site productivity during biomass harvesting. However, research is needed to guide development and evaluate the efficacy of BHGs, especially related to wildlife habitat.



We will monitor the environmental response (e.g., wildlife populations and degree of soil erosion) at a replicated set of woody biomass harvesting treatments to develop better information that can be used to modify existing BHGs or guide the development of new BHGs. We also will engage biomass harvest operators and other stakeholders via interviews and surveys and perform an economic analysis to ensure that recommended BHGs are operationally feasible. Based on research results, we will integrate recommended BHGs into forest certification system standards that will ensure environmental protection during harvests. We will employ an array of novel extension methodologies, including extension, webinars, existing forest-based bioenergy websites, and regional workshops, to transfer technology related to the project. We also will use novel techniques, including a new online course, to engage undergraduate and graduate students in issues related to woody biomass harvesting.

**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

**DOCKET NO. SP-297, SUB 0**

**BEFORE THE NORTH CAROLINA UTILITIES COMMISSION**

In the Matter of  
Application of Orbit Energy, Inc., for ) ORDER ACCEPTING  
Registration as a New Renewable Energy ) REGISTRATION OF NEW  
Facility ) RENEWABLE ENERGY FACILITY

**BY THE CHAIRMAN:** On May 19, 2008, Orbit Energy, Inc. (Orbit), filed a registration statement pursuant to Commission Rule R8-66 for a 1.628 MW new renewable energy facility to be located near Clinton in Sampson County, North Carolina. Orbit stated that the facility will generate electricity using methane gas produced from organic wastes from a Sampson County pork packaging facility and from a local swine farm.

Orbit stated that a 28-kilowatt (kW) generator is already installed at the site. An additional 1.6 MW generator will be installed and placed into service on or about September 1, 2009. On June 18, 2008, Orbit confirmed that, while the 28-kW generator has been on-site since 2001, it has never been operated.

Orbit's filing included certified attestations that: 1) Orbit 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) Orbit will not remarket or otherwise resell any renewable energy certificates (RECs) sold to an electric power supplier to comply with GS 62-133.8; and 4) Orbit 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 29, 2008, the Public Staff filed the recommendation required by Commission Rule R8-66(e) stating that Orbit's registration statement should be considered to be complete. No other party made a filing with respect to these issues.

Based upon the foregoing and the entire record in this proceeding, including the source of fuel stated in the registration statement, the Chairman finds good cause to accept registration of the facility as a new renewable energy facility. The Applicant shall annually file the information required by Commission Rule R8-66 on or before April 1 of each year. Orbit will be required to participate in the REC tracking system to be designated by the Commission and regularly provide information to the tracking system regarding metered generation data in order to facilitate the issuance of RECs.

IT IS, THEREFORE, ORDERED as follows:

1. That the registration by Orbit of a biomass-fueled facility in Sampson County, North Carolina as a new renewable energy facility shall be, and hereby is, accepted.

2. That Orbit 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 19<sup>th</sup> day of June, 2008.

NORTH CAROLINA UTILITIES COMMISSION

*Gail L. Mount*

Gail L. Mount, Deputy Clerk

kj061908.01

**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

**DOCKET NO. SP-100, SUB 23**

**BEFORE THE NORTH CAROLINA UTILITIES COMMISSION**

In the Matter of Request for a Declaratory Ruling by Solid ) Recovered Fuel, LLC )	ORDER ON REQUEST FOR DECLARATORY RULING
--	--

**BY THE COMMISSION:** On February 23, 2009, Solid Recovered Fuel, LLC (SRF), filed a request for a declaratory ruling that (a) refuse-derived fuel (RDF) and RDF synthesis gas (Syngas) to be produced by SRF, as described in the petition, are "renewable energy resources" as defined by G.S. § 62-133.8(a)(8); (b) SRF's delivery of Syngas from a co-located gasifier to an electric utility boiler would not make SRF a "public utility" as defined in G.S. § 62-3(23); and (c) SRF'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).

According to the petition, SRF is a member-managed North Carolina limited liability company. Its members are MRR Southern, LLC, which is a solid waste management firm, and Fuqua Rich Weeks, LLC, which is a private equity firm. SRF was formed for the purpose of developing, producing, and marketing renewable energy sources from solid waste streams. SRF asserted that RDF is a widely-recognized fuel source consisting of segregated components of municipal solid waste (MSW). The process, as described in the petition, is as follows: MSW is delivered to a material recovery facility (MRF), at which it undergoes various processing steps, including shredding and screening, to segregate the fuel fraction of the MSW stream from other residual materials. Materials that can be recycled are sorted and removed, and non-combustible materials are removed and shipped to a landfill. The fuel portion that remains constitutes the RDF, which has a heat value of approximately 6,500 BTU per pound on a higher heating value (HHV) basis.

As described in the petition, SRF plans to transport the resulting RDF to a gasifier constructed near the electric generating facility intended to receive the Syngas. In the gasifier, the RDF would be turned into Syngas having a heat value of approximately 200 BTU per standard cubic foot using a fluidized bed technology that has already been implemented successfully in the United States and Europe. The gasifier is expected to operate in a self-sustaining mode using the heat input from the RDF, except for the potential use of an external fuel source such as natural gas during startup. The Syngas leaving the gasifier would be delivered through piping to the boiler of an electric generating facility and would be co-fired with coal or other fossil fuels. For a coal-fired boiler, the co-firing of Syngas is expected to displace between 5% and 15%

of the coal consumption by the boiler (on a heat input basis).

In support of its requested declaratory rulings, SRF stated that the co-firing of Syngas has a beneficial impact on air quality. When compared with the combustion of coal alone, the co-firing of SRF's Syngas is expected to result in lower levels of several air pollutants, including nitrogen oxides (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), carbon dioxide (CO<sub>2</sub>), and mercury. Finally, SRF stated that it is in the process of exploring potential partnerships with North Carolina electric service providers and, that, as of the date of the filing, had reached a tentative agreement with one electric utility to evaluate the feasibility of co-firing Syngas at a facility in North Carolina.

#### Interpretation of "Renewable Energy Resources"

The first requested declaratory ruling requires a decision by the Commission as to whether the RDF and Syngas to be produced by SRF 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.

In its *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). These rules do not explicitly state whether RDF or an RDF-derived gas qualify as a "renewable energy resource." However, the Commission addressed the status of RDF during the rulemaking process. During the public comment period, Bio-Energy described its waste-to-energy conversion process and requested that the Commission specifically identify RDF and MSW as biomass within the meaning of the renewable energy resource definition. No party commented on Bio-Energy's request. The Commission 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 the asserted facts. In that Order, the Commission noted that 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. Alternatively, the owner of a facility can seek a declaratory ruling from the Commission that the facility qualifies as a renewable energy facility or a new renewable energy facility. Therefore, rather than potentially limiting the definition of "biomass" on the basis of an incomplete record in the rulemaking proceeding, the

Commission concluded that "biomass" should not be separately defined in Rule R8-67. (Order dated February 29, 2008, p. 49)

In support of its request that the Commission declare that RDF and Syngas qualify as "renewable energy resources," SRF asserted that other federal and state authorities have consistently defined "biomass" to include MSW and RDF. The federal authorities include the United States Department of Energy and the United States Environmental Protection Agency (EPA). SRF indicated that the EPA's data shows that the biomass portion of MSW is approximately 69% by weight, which increases to 81% after the sorting processes at the MRF have been completed. SRF also asserted that the federal Biomass Research and Development Technical Advisory Committee, established by the Biomass Research and Development Act of 2000 (P.L. 106-224), has included segregated municipal waste in its definition of biomass and that this definition has been adopted by the North Carolina Biomass Council.

With respect to other states, SRF asserted that 19 of the 32 states that have established renewable energy portfolio standards have directly addressed RDF, solid waste conversion technologies, MSW combustion, or waste to energy facilities and classified them as renewable energy resources by statute or rule. SRF also stated that an additional five states may be added to this group if, as requested here, their decision-makers determine that RDF and Syngas are biomass resources. These 24 states are listed in Exhibit 3 to the petition.

With respect to the Syngas produced from the RDF, SRF argued that the definition of "renewable energy resource" in G.S. § 62-133.8(a)(8) explicitly includes combustible gas in the list of biomass resources. It therefore follows that, if RDF is considered to be biomass, Syngas, which is a "combustible gas" made from RDF, also would be a biomass resource.

Finally, SRF argued that the ruling it seeks is fully consistent with the public policy goals stated in Senate Bill 3, which amended G.S. § 62-2(a) by adding a new subsection (10). This subsection states that it is the policy of the State to promote the development of renewable energy and energy efficiency through the implementation of a REPS that will do all of the following:

- a. Diversify the resources used to reliably meet the energy needs of consumers in the State.
- b. Provide greater energy security through the use of indigenous energy resources available within the State.
- c. Encourage private investment in renewable energy and energy efficiency.
- d. Provide improved air quality and other benefits to energy consumers and citizens of the State.

SRF asserted that, by declaring SRF's RDF and Syngas to be "renewable energy resources," the Commission would promote each of these four goals. In support thereof, SRF stated that such a declaration would (a) diversify the energy resources

used in North Carolina by providing another approved fuel option for electric power suppliers who must meet their REPS obligations; (b) promote the use of local MSW, which is an indigenous energy resource; (c) encourage private investment by parties such as SRF whose willingness to commit their resources would depend on the regulatory status of RDF and the resulting Syngas; and (d) result in significant environmental benefits, including improved air quality. In addition, SRF stated that the use of RDF or Syngas as a fuel would result in the beneficial use of a resource that would otherwise be disposed of in a landfill.

SRF argued that the real question presented by the petition is not whether RDF and Syngas should be considered biomass, but rather is what percentage of SRF's RDF and Syngas constitutes biomass. Because the biomass content of RDF may vary depending on the source of the MSW, SRF stated that it would stipulate as a condition of the requested declaration (a) to conduct testing of its RDF production on a daily basis during the first 30 days of production to quantify the biomass content in the RDF; and (b) thereafter, to conduct quarterly testing of its RDF production during each calendar year of operation. SRF proposed that, for the first or partial calendar year of operation, the biomass content of its RDF would be based on the average of the 30 days of daily sampling. For each calendar year of operations after the first whole or partial calendar year of operations, the biomass content of its RDF would be equal to the average of the four quarterly analyses for the preceding year.

#### Public Utility Status

The second declaratory ruling requested by SRF is that its delivery of Syngas through piping from a co-located gasifier to an electric utility boiler would not make it a "public utility" as defined in G.S. § 62-3(23). In support of this request, SRF argued that, under the standard enunciated in *State ex rel. Utilities Commission v. Simpson*, 295 N.C. 519, 246 S.E. 2d 753 (1978), its production and delivery of piped gas to a single, co-located customer which will be a regulated entity that has agreed pursuant to a bargained for transaction to allow the gasifier to be co-located and to purchase its output, should not cause it be regarded as a public utility under North Carolina law. SRF stated in its petition that it does not intend to offer the gas to any other potential buyer.

#### Certificate Requirement

The third declaratory ruling requested by SRF is that its 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).

General Statute § 62-110(a) prohibits a public utility from constructing, operating, or acquiring ownership or control of any public utility plant or system without first obtaining a certificate that public convenience and necessity requires or will require such construction, operation, or acquisition. SRF asserted that this statute does not

apply if its proposed activities have been found not to cause it to be considered to be a public utility.

General Statute § 62-110.1(a) requires a public utility or a person proposing to construct any steam, water, or other facility for the generation of electricity to be directly or indirectly used for the furnishing of public utility service to obtain a certificate of public convenience and necessity. SRF argued that its delivery of Syngas from a co-located gasifier to an electric utility boiler should not be considered the direct or indirect furnishing of public utility service.

#### Public Staff Recommendation

The Public Staff presented this matter to the Commission at its Regular Staff Conference on March 23, 2009. With respect to the definition of "renewable energy resource," the Public Staff stated that, based upon the facts and representations made in the petition, it recommended that the Commission declare that the percentage of SRF's RDF that is determined by testing to be biomass, as specifically described in the petition and subject to verification of the testing procedures and results, as appropriate, is a "renewable energy resource" as defined by G.S. § 62-133.8(a)(8) and that the same percentage of the Syngas produced from that RDF, subject to the same conditions, also is a "renewable energy resource" as defined by G.S. § 62-133.8(a)(8).

With respect to public utility status, the Public Staff stated that, based upon the regulatory circumstances of this case and the factors considered by the Commission when ruling upon previous requests for declaratory rulings involving the piping of landfill gas, the Public Staff believed that SRF's proposed production, sale, and delivery of Syngas, as specifically described in the petition, should not cause SRF to be regarded as a public utility under G.S. § 62-3(23). Accordingly, the Public Staff recommended that the Commission grant this part of SRF's requested declaratory ruling.

Finally, with respect to the certificate issue, the Public Staff stated that neither SRF's construction of a co-located gasifier nor the construction of the piping connection from the gasifier to an existing electric utility boiler should be considered to be subject to the certificate of public convenience and necessity requirement under G.S. § 62-110(a) or under G.S. § 62-110.1(a). The Public Staff, therefore, recommended that the Commission grant this part of SRF's requested declaratory ruling.

#### Commission Conclusion

Based upon the foregoing, a careful consideration of the record in this docket, and the Public Staff's recommendation, the Commission concludes that, based upon the facts and representations in SRF's petition and as conditioned as recommended by the Public Staff and hereinafter stated, SRF's petition for a declaratory ruling should be granted. The Commission notes that the present decision is limited to the facts set forth in this Order and SRF's petition, and it 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, based upon the facts and representations made in the petition, the percentage of SRF's RDF that is determined by testing to be biomass, as specifically described in the petition and subject to verification of the testing procedures and results, as appropriate, is a "renewable energy resource" as defined in G.S. § 62-133.8(a)(8).

2. That the same percentage of the Syngas produced from that RDF, subject to the same conditions, also is a "renewable energy resource" as defined in G.S. § 62-133.8(a)(8).

3. That, based upon the regulatory circumstances of this case and the relevant factors, SRF's proposed production, sale, and delivery of Syngas, as specifically described in the petition, shall not cause SRF to be regarded as a public utility under G.S. § 62-3(23).

4. That neither SRF's construction of a co-located gasifier nor the construction of the piping connection from the gasifier to an existing electric utility boiler shall be considered to be subject to the certificate of public convenience and necessity requirement under G.S. § 62-110(a) or under G.S. § 62-110.1(a).

ISSUED BY ORDER OF THE COMMISSION.

This the 25<sup>th</sup> day of March, 2009.

NORTH CAROLINA UTILITIES COMMISSION

*Gail L. Mount*

Gail L. Mount, Deputy Clerk

Kc032309.02

Commissioners Bryan Beatty and Susan Rabon did not participate in this decision.

**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

**DOCKET NO. SP-410, SUB 0**

**BEFORE THE NORTH CAROLINA UTILITIES COMMISSION**

In the Matter of Application of Matthew H. Keil for Registration of a New Renewable Energy Facility	) ORDER ACCEPTING ) REGISTRATION OF NEW ) RENEWABLE ENERGY FACILITY
--	---

**BY THE CHAIRMAN:** By submittals dated March 12, 2009, and May 5, 2009, Matthew H. Keil filed a registration statement pursuant to Commission Rule R8-66 for a new renewable energy facility to be located in Wake County, North Carolina. The submittals stated that the 2.4-kW facility is proposed to be operational by November 30, 2009, and will be fueled by ethanol derived from 100% renewable organic materials. Mr. Keil intends to interconnect with Progress Energy Carolinas, Inc. (PEC), and sell the facility's excess electrical output and all renewable energy certificates (RECs) to PEC.

The submittals included certified attestations that: 1) the facility 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) Mr. Keil will not remarket or otherwise resell any RECs sold to PEC for compliance with G.S. 62-133.8; and 4) Mr. Keil consents to the auditing of his books and records by the Public Staff insofar as those records relate to transactions with PEC.

On May 11, 2009, the Public Staff filed the recommendation required by Commission Rule R8-66(e) stating that Mr. Keil's registration statement as a new renewable energy facility should be considered to be complete. No other party made a filing with respect to these issues.

Based upon the foregoing and the entire record in this proceeding, including the source of fuel stated in the registration statement, the Chairman finds good cause to accept registration of the facility as a new renewable energy facility. Mr. Keil shall annually file the information required by Commission Rule R8-66 on or before April 1 of each year. Mr. Keil will be required to participate in the REC tracking system to be designated by the Commission pursuant to Docket No. E-100, Sub 121 and regularly provide information to the system regarding metered generation data in order to facilitate the issuance of RECs.

IT IS, THEREFORE, ORDERED as follows:

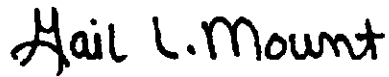
1. That the registration by Matthew H. Keil for his biomass facility to be located in Wake County, North Carolina, as a new renewable energy facility shall be, and hereby is, accepted.

2. That Mr. Keil 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 June, 2009.

NORTH CAROLINA UTILITIES COMMISSION

A handwritten signature in black ink that reads "Gail L. Mount". The signature is written in a cursive, flowing style.

Gail L. Mount, Deputy Clerk

kj061209.02

**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

**DOCKET NO. SP-165, SUB 3**

**BEFORE THE NORTH CAROLINA UTILITIES COMMISSION**

In the Matter of

Application of EPCOR USA North Carolina, LLC,	)	ORDER ISSUING AMENDED
for Issuance of Amended Certificates of Public	)	CERTIFICATES, ACCEPTING
Convenience and Necessity, for Registration of	)	REGISTRATION STATEMENT,
New Renewable Energy Facilities and Request for	)	AND ISSUING DECLARATORY
Determination as a Renewable Energy Resource	)	RULING

**BY THE COMMISSION:** On October 21, 2009, EPCOR USA North Carolina, LLC (EPCOR), filed (1) an application for the issuance of amended certificates of public convenience and necessity (CPCNs) for the electric generating facilities it owns in Southport and Roxboro, North Carolina, (2) a registration statement for the two facilities, and (3) a request that the Commission determine that tire-derived fuel (TDF) or, alternatively, the natural rubber portion thereof, to be co-fired at the two facilities is a renewable energy resource. The Southport facility, located in Brunswick County, North Carolina, is a 112-MW coal-fired cogeneration facility that currently sells electricity to Progress Energy Carolinas, Inc. (PEC), and steam to Archer Daniels Midland. The Roxboro facility, located in Person County, North Carolina, is a 56-MW coal-fired electric generation facility that sells electricity to PEC and, before closure of the manufacturing facility, sold steam to Collins & Aikman Corporation. EPCOR is in the process of substantial reconstruction to convert both the Southport and Roxboro facilities into state-of-the-art facilities designed to burn a fuel mix of coal, wood waste, and TDF. EPCOR requests that the facilities be approved as new renewable energy facilities and earn renewable energy certificates (RECs) for the combination of co-fired renewable energy resources in its fuel mix – not the coal portion. At the Southport facility, EPCOR proposes to co-fire approximately equal proportions of TDF (33%), wood waste (33%), and coal (33%). At the Roxboro facility, EPCOR proposes to co-fire approximately 25% coal, 50% wood waste, and 25% TDF. The reworking of the facilities began on April 1, 2009, and is expected to be completed by January 1, 2010. After completion of the improvements, the output from the Southport facility will be reduced to approximately 86 MW, and the output from the Roxboro facility will be reduced to approximately 47 MW.

On November 17, 2009, the Public Staff filed its response to the registration statement as required by Commission Rule R8-66. In its response, the Public Staff recommends that the Commission issue the amended CPCNs as requested. The Public Staff notes that the facilities were originally built by Cogentrix of North Carolina, Inc.; that they had been transferred to various affiliates and, ultimately, EPCOR; and that EPCOR is in the process of substantially reconstructing both facilities. The Public Staff

further recommends that, by virtue of the fuel mix and the extensive and costly modifications and additions that are being undertaken, the facilities should be considered to be new renewable energy facilities and that the Commission should accept the registration statement for the two facilities. Lastly, the Public Staff states that it is not clear whether TDF falls within the definition of "biomass" and "renewable energy resource" in G.S. 62-133.8(a)(8), but that it is satisfied with the information provided by EPCOR to support a finding that at least a percentage of TDF by weight is from the natural rubber used in tire manufacturing and should be considered to be a renewable energy resource. The Public Staff recommends that the Commission (a) undertake such proceedings as it considers appropriate to determine whether 100 percent of TDF is a renewable energy resource or (b) rule that the percentage of TDF by weight that is from natural rubber qualifies as a renewable energy resource.

## **DISCUSSION AND CONCLUSIONS**

Based upon the foregoing and the entire record in this proceeding, including the source of fuel stated in the application, the Commission finds good cause to approve the application, issue the requested amended certificates, and accept registration of the Southport and Roxboro facilities as new renewable energy facilities. The Commission notes that a similar ruling was issued in Docket No. SP-161, Sub 1 regarding a facility owned by Coastal Carolina Clean Power, LLC. In this case, the Southport and Roxboro facilities are being modified from the use of coal as their only fuel to allow co-firing, at least in part, of renewable fuels.

In support of its request for a declaratory ruling that TDF is a "renewable energy resource," EPCOR argues that TDF is a combustible residue that meets the definition of biomass.<sup>1</sup> Notwithstanding the numerous policy reasons offered by EPCOR for encouraging the use of TDF, a recurring waste product, as fuel for electric generation, the Commission is not persuaded that all TDF should be considered to be "biomass." The Commission does not disagree that TDF is a combustible residue. However, as EPCOR notes, a fundamental principle of "biomass" is the requirement of "biogenic" or "organic" matter, generally defined as related to or derived from living organisms. EPCOR argues that Senate Bill 3 does not include the terms "biogenic" or "organic," but the Commission nonetheless finds that such terms are inherent in the use of the word "biomass."

---

<sup>1</sup> "Renewable energy resource" is defined in G.S. 62-133.8(a)(8) 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. [Emphasis added.]

EPCOR further argues that the North Carolina Biomass Council, in its 2007 Biomass Roadmap, concluded that tires should not be excluded from the definition of biomass when the Council borrowed a definition of biomass from another study wherein that definition specifically omitted language that excluded tires. Nevertheless, the Roadmap defines "biomass" as "any organic matter that is available on a renewable or recurring basis." (Emphasis added.) Moreover, tires are not listed in the Roadmap among the total available waste resources. (See Figure 5, at p.9.) Similarly, other North Carolina organizations include the word "organic" in their definition of biomass. The North Carolina Biofuels Center, for example, defines "biofuels" as "any transportation or liquid fuel made from biomass (organic plant material)." The Commission, therefore, concludes that TDF, in general, may not be considered to be "organic" and does not meet the definitions of "biomass" or "renewable energy resource."

Finally, EPCOR urges the Commission, if it finds that all TDF is not a renewable energy resource, to nevertheless find that the natural rubber content of the TDF, which can be classified as organic, qualifies as such. EPCOR states,

The Rubber Manufacturers Association [RMA], based upon its tire manufacturer members' analyses of the raw materials used in tire manufacturing, states that over 25% by weight of TDF fuel value is from the natural rubber used in tire manufacturing. The World Business Council for Sustainable Development's Tire Industry Project, whose members include leading tire manufacturers such as Bridgestone, Goodyear, and Michelin, also states that the natural rubber content in tires is "25% or more." [Footnotes omitted.]

EPCOR attached two reports supporting the positions stated above. In its 2009 report, Scrap Tire Markets in the United States, 9<sup>th</sup> Biennial Report, the RMA states:

[A]s the federal government continues to debate national climate change policy, the biomass content of tire-derived fuel must be infused into the debate. RMA estimates that over 25 percent by weight of TDF fuel value is biomass (from the natural rubber used in tire manufacturing).

In its 2008 report, Managing End-of-Life Tires, the World Business Council states:

A typical passenger tire contains 30 types of synthetic rubber, eight types of natural rubber, eight types of carbon black, steel cord, polyester, nylon, steel bead wire, silica and 40 different kinds of chemicals, waxes, oils and pigments ... Natural rubber content in tires (25% or more) is regarded as carbon neutral, as rubber plantations sequester carbon from the atmosphere during their lifetime.

As noted by EPCOR and the reports it cites, some portion of the TDF is derived from natural rubber, an organic material, and meets the definition of biomass. The reports cited by EPCOR for the quantity of natural rubber in TDF, however, fail to

reference or cite any studies or analyses to support their estimates. The Commission, therefore, concludes that EPCOR should be allowed to earn RECs for that percentage of TDF that can be demonstrated, through the submission of appropriate additional *primary reference materials in this docket, to be derived from natural rubber.*

Lastly, EPCOR shall annually file the information required by Commission Rule R8-66 on or before April 1 of each year. In addition to the electric generation data for the Southport facility required by Rule R8-66(b)(2), as a combined heat and power facility, EPCOR shall file, for the purpose of verifying RECs, sufficient information to determine the amount of waste heat recovered and used as measurable thermal or mechanical energy at a retail electric customer's facility. Pursuant to Commission Rule R8-67(d)(2), the facilities, which use both renewable energy resources and nonrenewable energy resources to produce energy, shall earn electric and thermal RECs based only upon the energy derived from renewable energy resources in proportion to the relative energy content of the fuels used. Lastly, EPCOR will be required to participate in the REC tracking system to be designated by the Commission pursuant to Docket No. E-100, Sub 121 and regularly provide information regarding metered generation data, thermal energy production and the Btu content of, and amount of, each kind of fuel used in order to facilitate the issuance of RECs.

IT IS, THEREFORE, ORDERED as follows:

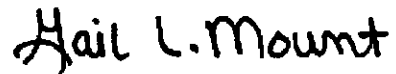
1. That the application is approved and the requested amended certificates of public convenience and necessity are hereby issued;
2. That Appendix A shall constitute the certificate of public convenience and necessity for an 86-MW cogeneration facility fueled by coal, wood waste, and tire-derived fuel located in Southport in Brunswick County, North Carolina;
3. That Appendix B shall constitute the certificate of public convenience and necessity for a 47-MW electric generation facility fueled by coal, wood waste, and tire-derived fuel located in Roxboro in Person County, North Carolina;
4. That the registration by EPCOR of its Southport and Roxboro facilities as new renewable energy facilities is accepted;
5. That EPCOR shall earn RECs for that percentage of tire-derived fuel that can be demonstrated, through the submission of appropriate additional primary reference materials in this docket, to be derived from natural rubber; and
6. That EPCOR shall annually file the information required by Commission Rule R8-66 on or before April 1 of each year. In addition to the electric generation data for the Southport facility required by Rule R8-66(b)(2), as a combined heat and power facility, the Applicant shall file, for the purpose of verifying RECs, sufficient information

to determine the amount of waste heat recovered and used as measurable thermal or mechanical energy at a retail electric customer's facility.

ISSUED BY ORDER OF THE COMMISSION.

This the 17<sup>th</sup> day of December, 2009.

NORTH CAROLINA UTILITIES COMMISSION

A handwritten signature in black ink that reads "Gail L. Mount". The signature is written in a cursive, slightly stylized font.

Gail L. Mount, Deputy Clerk

Kc121709.01

Commissioners Robert V. Owens, Jr., and Susan W. Rabon did not participate in this decision.



**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

DOCKET NO. SP-165, SUB 3

EPCOR USA North Carolina, LLC  
2000 York Road, Suite 129, Oakbrook, Illinois 60523

is hereby issued this

**CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY  
PURSUANT TO G.S. 62-110.1**

for an 86-MW cogeneration facility  
fueled by coal, wood waste, and tire-derived fuel

located

at 1281 Powerhouse Drive in  
Southport, North Carolina 28461,

subject to all orders, rules, regulations and conditions  
as are now or may hereafter be lawfully made  
by the North Carolina Utilities Commission.

ISSUED BY ORDER OF THE COMMISSION.

This the 17<sup>th</sup> day of December, 2009.

NORTH CAROLINA UTILITIES COMMISSION

*Gail L. Mount*

Gail L. Mount, Deputy Clerk

**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

DOCKET NO. SP-165, SUB 3

EPCOR USA North Carolina, LLC  
2000 York Road, Suite 129, Oakbrook, Illinois 60523

is hereby issued this

**CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY  
PURSUANT TO G.S. 62-110.1**

for a 47-MW electric generation facility  
fueled by coal, wood waste, and tire-derived fuel

located

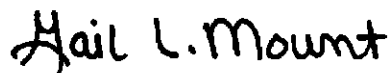
at 331 Allie Clay Road in  
Roxboro, North Carolina 27573,

subject to all orders, rules, regulations and conditions  
as are now or may hereafter be lawfully made  
by the North Carolina Utilities Commission.

ISSUED BY ORDER OF THE COMMISSION.

This the 17<sup>th</sup> day of December, 2009.

NORTH CAROLINA UTILITIES COMMISSION

A handwritten signature in black ink that reads "Gail L. Mount". The signature is written in a cursive, flowing style.

Gail L. Mount, Deputy Clerk

STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH

DOCKET NO. SP-578, SUB 0

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of

Application of Green Energy Solutions NV,	) ORDER ACCEPTING
Inc., for Registration of a New Renewable	) REGISTRATION OF NEW
Energy Facility	) RENEWABLE ENERGY FACILITY

BY THE COMMISSION: On December 2, 2009, Green Energy Solutions NV, Inc., (GES) filed a registration statement pursuant to Commission Rule R8-66 for a 1.628-MW new renewable energy facility to be located in Darlington County, South Carolina. GES stated that the combined heat and power facility will generate electricity using methane gas produced via anaerobic digestion of poultry litter from the Collins Chick Farm. In email correspondence with the Public Staff, which was filed in this docket, GES stated that the waste heat from the electric generators will provide temperature control for the methane-producing anaerobic digester as well as the chicken houses at the Collins Chick Farm. GES stated that the facility is projected to come on line by the end of June 2010, provided that it timely obtains a power purchase agreement to sell its output.

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) GES 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) GES 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 December 11, 2009, the Public Staff filed the recommendation required by Commission Rule R8-66(e) stating that GES's registration statement should be considered to be complete. No other party made a filing with respect to these issues.

On January 8, 2010, GES filed a motion for clarification in Docket No. E-2, Sub 113. In that submittal, GES stated that, in its process, poultry waste is mixed with other organic, biodegradable materials, which are together digested to produce methane.

Based upon the foregoing and the entire record in this proceeding, including the sources of fuel stated in the registration statement and GES's January 8, 2010 submission in Docket No. E-100, Sub 113, the Commission finds good cause to accept

registration of the facility as a new renewable energy facility. Contemporaneous with this Order, the Commission has issued an Order in Docket No. E-100, Sub 113 clarifying 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. To support the issuance of RECs, GES, therefore, will be required to provide evidence as to how it will determine the percent of biogas attributable to the anaerobic digestion of poultry waste, versus the percent derived from other biomass sources.

GES's facility will produce both electric and thermal energy. 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 at the Collins Chick Farm is eligible to earn RECs pursuant to Commission Rule R8-67(g)(4).

GES shall annually file the information required by Commission Rule R8-66 on or before April 1 of each year. GES will be required to participate in the REC tracking system to be designated by the Commission in Docket No. E-100, Sub 121, and regularly provide information to the tracking system regarding metered electric generation data, qualifying thermal energy generation data, and the percent of those energy streams that is ultimately derived from poultry waste versus other biomass materials.

IT IS, THEREFORE, ORDERED as follows:

1. That the registration by GES of its electric generation facility, fueled by methane gas produced via poultry waste and other biomass materials, and located in Darlington County, South Carolina, as a new renewable energy facility shall be, and hereby is, accepted.

2. That GES 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 20<sup>th</sup> day of January, 2010.

NORTH CAROLINA UTILITIES COMMISSION

*Gail L. Mount*

Gail L. Mount, Deputy Clerk

kh012010.02

**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

**DOCKET NO. SP-100, SUB 25**

**BEFORE THE NORTH CAROLINA UTILITIES COMMISSION**

In the Matter of  
Request for Declaratory Ruling by the Water     ) ORDER ON REQUEST FOR  
and Sewer Authority of Cabarrus County     ) DECLARATORY RULING

**BY THE COMMISSION:** On February 3, 2010, the Water and Sewer Authority of Cabarrus County (WSACC) filed a request for a declaratory ruling that (1) biosolids, the organic material remaining after treatment of domestic sewage, combusted at WSACC's Rocky River Regional Wastewater Treatment Plant (the Rocky River facility) are a "renewable energy resource" as defined by G.S. 62-133.8(a)(8) and (2) WSACC is a "nonutility" for purposes of G.S. 62-110.1(g) and, therefore, is required to file a report of proposed construction pursuant to Commission Rule R8-65 rather than an application for a certificate of public convenience and necessity pursuant to Rule R8-64.

WSACC is an independent, incorporated body created to plan for and provide wholesale wastewater transportation and treatment for municipalities in Cabarrus County. It also provides reservoir management for entities in Cabarrus County. WSACC operates the Rocky River facility, which has an oil-fired furnace for the purpose reducing biosolids to ash. The biosolids are generated by this treatment plant and others in the region. The furnace uses fuel oil to ignite the biosolids, but once ignited, the biosolids burn without the need for additional fuel.

Currently, the heated air from the furnace is cooled and scrubbed prior to being released as exhaust. WSACC intends to add a 1.942-MW steam cycle power system to generate electricity and possibly use wood waste to supplement the biosolids. In addition to generating electricity, WSACC intends to use thermal energy from the furnace to heat buildings at the plant site during cold weather. WSACC's filing included attachments in support of its request.

The Public Staff presented this matter to the Commission at its Regular Staff Conference on February 22, 2010.

The Commission notes that the definition of "renewable energy resource" in G.S. 62-133.8(a)(8) includes any "biomass resource," listing several examples without limitation, and in its *Order Adopting Final Rules* in Docket No. E-100, Sub 113, the Commission determined 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." The biosolids produced at the Rocky River facility are biological in origin, are continuously generated, and are not depleted like uranium or fossil fuels. Consequently, the Commission finds that they should be considered a renewable energy resource within the meaning of the statute.

The Commission also finds, however, that only the energy derived from biosolids should be considered a renewable energy resource. Any energy derived from fuel oil used for ignition purposes, and, or from any other fossil fuel that may be used at the Rocky River facility, should not be considered a renewable energy resource, and any energy generated there from should not be eligible to be used for compliance with G.S. 62-133.8.

The Commission further finds that WSACC was organized in 1992 pursuant to the North Carolina Water and Sewer Authorities Act. G.S. 62-3(23)(d) provides: "The term 'public utility' . . . shall not include . . . an authority organized under the North Carolina Water and Sewer Authorities Act." Thus, WSACC is not a public utility.

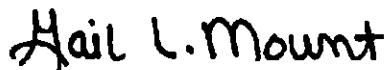
IT IS, THEREFORE, ORDERED as follows:

1. That biosolids, the organic material remaining after treatment of domestic sewage, combusted at the Rocky River facility are a "renewable energy resource" as defined by G.S. 62-133.8(a)(8).
2. That any energy derived from the combustion of fuel oil, rather than biosolids, at the Rocky River facility is not eligible to be used for compliance with G.S. 62-133.8.
3. That WSACC is a "nonutility" for purposes of G.S. 62-110(g).

ISSUED BY ORDER OF THE COMMISSION.

This the 24<sup>th</sup> day of February, 2010.

NORTH CAROLINA UTILITIES COMMISSION



Gail L. Mount, Deputy Clerk

Commission Robert V. Owens, Jr., did not participate in this decision.

Kc022210.05

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 CONSOLIDATING
Units 5 and 6, as New Renewable Energy	)	DOCKETS, SCHEDULING
Facilities	)	EVIDENTIARY HEARING AND
	)	ORAL ARGUMENT, AND
DOCKET NO. E-7, SUB 940	)	ESTABLISHING DISCOVERY
	)	GUIDELINES
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	)	

BY THE CHAIRMAN: On March 1, 2010, Duke Energy Carolinas, LLC (Duke), filed applications in the above-captioned dockets to register 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 Standard (REPS). In its registration applications, Duke stated that biomass co-firing test burns were conducted at each facility using sawdust and/or whole tree chips.

On March 8 and 12, 2010, the Public Staff filed in each of the above-captioned dockets the recommendations required by Rule R8-66(e) stating that Duke's registration statements as new renewable energy facilities should be considered to be complete.

On March 15, 2010, Environmental Defense Fund (EDF) and Southern Environmental Law Center (SELC) filed a joint Petition to Intervene and Recommendations in each of the above-captioned dockets. EDF and SELC request that the Commission deny or stay Duke's registrations, arguing that the whole tree woody biomass Duke seeks to register is not wood waste and is not a renewable energy resource under the REPS, and that the Commission issue an order setting a date for these matters to be heard. Alternatively, EDF and SELC request that the Commission defer consideration of Duke's registrations and allow the General Assembly to clarify the definition of biomass, as recommended by the Environmental Management Commission.

On March 26, 2010, North Carolina Sustainable Energy Association (NCSEA) filed a Petition to Intervene and Motion for Hearing in each of the above-captioned dockets. In requesting that the Commission set these matters for hearing, NCSEA states that the use of whole tree chips as fuel raises a host of important issues warranting comprehensive review.

On March 29 and 30, 2010, the Commission issued orders in each of the above-captioned dockets allowing the petitions to intervene filed by EDF, SELC and NCSEA.

Commission Rule R8-66(e) provides that, "[u]pon receipt of all required information, the Commission will promptly issue an order accepting the registration or setting the matter for hearing." After careful consideration, the Chairman is of the opinion that good cause exists to consolidate the two above-captioned dockets, each of which contains unresolved issues that are similar in nature; to schedule an evidentiary hearing and oral argument on the registration requests to consider the contested factual and legal issues; and to establish discovery guidelines and deadlines for the filing of testimony and briefs.

The guidelines regarding discovery in this docket, subject to modification for good cause shown, are as follows:

1. Any deposition which a party desires to take shall be taken before the deadline for filing of Public Staff and intervenor testimony. Notice of deposition shall be served on all parties at least seven days prior to the taking of the deposition.

2. Any motion for subpoena of a witness to appear at the evidentiary hearing shall be filed with the Commission before the deadline for filing of Public Staff and intervenor testimony, shall be served by hand delivery or facsimile to the person sought to be subpoenaed at or before the time of filing with the Commission, and shall make a reasonable showing that the evidence of such person will be material and relevant to an issue in the proceeding. G.S. 62-62. Unless an objection is filed, the Chief Clerk shall issue the requested subpoena 24 hours after such motion is filed.

3. Formal discovery requests related to the application and Duke's prefiled direct testimony shall be served on Duke by hand delivery or facsimile not later than fourteen days prior to the deadline for filing of Public Staff and intervenor testimony. The party served shall have up to ten calendar days to file with the Commission objections to the discovery requests on an item-by-item basis, but in no event shall objections be filed later than ten days prior to the deadline for filing of Public Staff and intervenor testimony.

4. Formal discovery requests of the Public Staff or intervenors shall be served by hand delivery or facsimile not later than three days after such testimony is filed. The party served shall have up to three calendar days to file with the Commission objections to the discovery requests on an item-by-item basis, but in no event shall objections be filed later than five days after that party's testimony was filed.



5. Formal discovery requests related to Duke's prefiled rebuttal testimony shall be served on Duke by hand delivery or facsimile not later than two days after such testimony is filed. The party served shall have up to two calendar days to file with the Commission objections to the discovery requests on an item-by-item basis, but in no event shall objections be filed later than three days after the rebuttal testimony was filed. Discovery related to rebuttal testimony shall be limited to new material introduced in such rebuttal testimony and will be carefully scrutinized upon objection that such discovery should have been sought during the initial period of discovery from Duke.

6. Discovery requests need not be filed with the Commission when served; however, any party filing objections shall attach a copy of the relevant discovery request to the objections. Each discovery request, or part thereof, to which no objection is filed shall be answered by the time objections are due, subject to other agreement of the affected parties or other order of the Commission. Upon the filing of objections, the party seeking discovery shall have two days to file a motion to compel with the Commission, and the party objecting to discovery shall have one day thereafter to file a response. All objections, motions to compel, and responses shall be served on the other affected party by hand delivery or facsimile at or before the time of filing with the Commission.

7. A party shall not be granted an extension of time to pursue discovery because of that party's late intervention or other delay in initiating discovery.

The Commission recognizes that in the past most discovery has been conducted in an informal manner without the need for Commission involvement or enforcement, and that such has been generally successful. The above guidelines are without prejudice to the parties conducting informal discovery or exchanging information by agreement at any time with the understanding that such will not be enforceable by the Commission if outside the guidelines.

IT IS, THEREFORE, ORDERED as follows:

1. That consideration of the registration statements filed by Duke in Docket No. E-7, Subs 939 and 940 shall be consolidated;

2. That an evidentiary hearing shall be scheduled for Wednesday, July 14, 2010, at 9:30 a.m., in Commission Hearing Room 2115, Dobbs Building, 430 North Salisbury Street, Raleigh, North Carolina, for the purpose of determining facts at issue regarding the registration statements filed by Duke in these dockets;

3. That the evidentiary hearing shall be followed by an oral argument on the legal issues regarding the registration statements filed by Duke in these dockets;

4. That any person having an interest in this proceeding may file a petition to intervene stating such interest on or before Monday, June 21, 2010;

5. That Duke shall file its direct testimony and exhibits and pre-hearing brief on or before Monday, May 24, 2010;

6. That the direct testimony and exhibits and pre-hearing briefs of the Public Staff and intervenors shall be filed on or before Monday, June 21, 2010;

7. That Duke shall file its rebuttal testimony and exhibits, if any, on or before Friday, July 2, 2010; and

8. That the parties shall comply with the discovery guidelines set forth herein.

ISSUED BY ORDER OF THE COMMISSION.

This the 27<sup>th</sup> day of April, 2010.

NORTH CAROLINA UTILITIES COMMISSION

*Gail L. Mount*

Gail L. Mount, Deputy Clerk

Kc042710.01

**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

**DOCKET NO. RET-10, SUB 0**

**BEFORE THE NORTH CAROLINA UTILITIES COMMISSION**

**In the Matter of**

<b>Application of North Mecklenburg Aquatics</b>	<b>) ORDER ACCEPTING</b>
<b>d/b/a Nomad Aquatics &amp; Fitness for</b>	<b>) REGISTRATION OF NEW</b>
<b>Registration of a New Renewable Energy</b>	<b>) RENEWABLE ENERGY FACILITY</b>
<b>Facility</b>	<b>)</b>

**BY THE CHAIRMAN:** On March 11, 2010, and April 21, 2010, North Mecklenburg Aquatics d/b/a Nomad Aquatics & Fitness (Nomad) filed a registration statement pursuant to Commission Rule R8-66 for a solar thermal hot water heating facility located in Huntersville in Mecklenburg County, North Carolina. Nomad's registration statement described its facility as consisting of 169 4x12 solar panels used to produce heat for two commercial swimming pools. Nomad stated that the solar thermal hot water heating facility became operational in January, 2007. In its March 11, 2010 filing, Nomad stated that it does not have any Btu monitoring devices, although it does continuously monitor the temperature of the pools, and requested that it be allowed to earn 429.45 renewable energy certificates (RECs) per year for 2008 and 2009 based upon the capacity of its solar panels.

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) Nomad will not remarket or otherwise resell any RECs sold to an electric power supplier to comply with G.S. 62-133.8; and 4) Nomad 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 April 1, 2010, the Public Staff filed a letter with the Commission noting that Nomad had requested that it be allowed to earn RECs from past, unmetered thermal generation and recommending that such RECs should not be allowed without a more rigorous analysis. On May 17, 2010, the Public Staff filed the recommendation required by Commission Rule R8-66, stating that Nomad's registration statement as a new renewable energy facility should be considered to be complete. The Public Staff noted that some metering exists at the pool, but that the metering is not sufficient to calculate the Btu generated by the solar thermal system. Therefore, based on its review of supplemental information provided by Nomad, the Public Staff recommended that Nomad should be allowed to earn 236 RECs per year for past years based upon an engineering analysis of the energy from the solar thermal system actually required to heat the pools. Lastly, the Public Staff stated that it does not believe that the cost of a

Btu meter should be prohibitive for this system, and recommended that any RECs claimed after the date of the final order in this matter must be calculated using a Btu meter. No other party made a filing with respect to these issues.

On June 10, 2010, Nomad filed a letter stating that it agreed with the Public Staff's calculation regarding the number of RECs earned from past operation of the solar thermal facility.

Based upon the foregoing and the entire record in this proceeding, the Chairman finds good cause to accept registration of the facility as a new renewable energy facility. G.S. 62-133.8(a) defines a renewable energy facility to include "a solar thermal energy facility" and a new renewable energy facility to include a renewable energy facility that was "placed into service on or after January 1, 2007." G.S. 62-133.8(a) further provides that a REC is "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 ...." Commission Rule R8-67(g)(4) provides as follows:

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 megawatt-hour for every 3,412,000 British thermal units of useful thermal energy produced.

Although Btu metering is preferable, especially on a large system, Rule R8-67(g)(4) does not require that a solar thermal facility be metered in order to earn RECs. A solar thermal facility must be metered, however, in order for any RECs earned to be eligible to be used to meet the solar set-aside requirement of G.S. 62-133.8(d) ("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.))

The Chairman, therefore, finds good cause to allow Nomad to earn RECs based upon an engineering analysis of the energy from the solar thermal system actually required to heat the pools. Given the facts alleged in this proceeding, including the statements regarding the operation of the solar thermal facility and the pools at the aquatic center, Nomad has earned between 33 and 34 unmetered solar thermal RECs per month during the months of April through October since 2008. However, Nomad must install appropriate Btu metering before subsequent RECs earned will be eligible to meet the solar set-aside requirement. Nomad shall annually file the information required by Commission Rule R8-66 on or before April 1 of each year. Lastly, Nomad will be

required to participate in the NC-RETS REC tracking system and regularly provide production information to the tracking system in order to facilitate the issuance of RECs.

IT IS, THEREFORE, ORDERED as follows:

1. That the registration by Nomad for its solar thermal hot water heating facility located in Huntersville in Mecklenburg County, North Carolina, as a new renewable energy facility shall be, and hereby is, accepted.

2. That Nomad 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 21st day of July, 2010.

NORTH CAROLINA UTILITIES COMMISSION

A handwritten signature in cursive script that reads "Patricia Swenson".

Patricia Swenson, Deputy Clerk

Sw072110.01

**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

**DOCKET NO. E-7, SUB 936**

**BEFORE THE NORTH CAROLINA UTILITIES COMMISSION**

<b>In the Matter of</b>	
<b>Application of Duke Energy Carolinas, LLC,</b>	<b>)</b>
<b>Pursuant to G.S. 62-133.8 and NCUC</b>	<b>)</b>
<b>Rule R8-67 Relating to Incremental Costs for</b>	<b>)</b>
<b>Compliance with the Renewable Energy and</b>	<b>)</b>
<b>Energy Efficiency Portfolio Standard</b>	<b>)</b>
	<b>ORDER APPROVING REPS AND REPS EMF RIDERS</b>

**HEARD:** Tuesday, June 8, 2010, at 9:00 a.m. and Wednesday, June 9, 2010, at 9:00 a.m. in the Commission Hearing Room, Dobbs Building, 430 North Salisbury Street, Raleigh, North Carolina

**BEFORE:** Commissioner Bryan E. Beatty, Presiding; Chairman Edward S. Finley, Jr.; and Commissioners Lorinzo L. Joyner, William T. Culpepper, III, Susan W. Rabon, ToNola D. Brown-Bland, and Lucy T. Allen

**APPEARANCES:**

For Duke Energy Carolinas, LLC:

Lara Simmons Nichols, Associate General Counsel, and Charles A. Castle, Senior Counsel, Duke Energy Corporation, EC03T/Post Office Box 1006, Charlotte, North Carolina 28201-1006

For Blue Ridge Electric Membership Corporation and Rutherford Electric Membership Corporation:

M. Gray Styers, Jr., Styers & Kemerait, PLLC, 1101 Haynes Street, Suite 101, Raleigh, North Carolina 27604

For North Carolina Eastern Municipal Power Agency, North Carolina Municipal Power Agency Number 1, and ElectriCities of North Carolina, Inc.:

W. Mark Griffith, Poyner & Spruill, LLP, 301 Fayetteville Street, Suite 1900, Raleigh, North Carolina 27601

For GreenCo Solutions, Inc.:

Richard Feathers, North Carolina Electric Membership Corporation, Post Office Box 27306, Raleigh, North Carolina 27611

For Carolina Utility Customers Association, Inc.:

Robert F. Page, Crisp, Page & Currin, LLC, 4010 Barrett Drive, Suite 205,  
Raleigh, North Carolina 27609

For North Carolina Sustainable Energy Association:

Kurt Olson, North Carolina Sustainable Energy Association, 1111 Haynes  
Street, Suite 111, Raleigh, North Carolina 27604

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 2, 2010, Duke Energy Carolinas, LLC (Duke or the Company), filed its 2009 compliance report and 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 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 under-recovery or over-recovery of compliance costs. Duke's application was accompanied by the prefiled testimony and exhibits of Owen A. Smith, Managing Director, Renewable Energy Strategy and Compliance, and Jane L. McManeus, Director, Rates. In its application and prefiled testimony, Duke sought approval of proposed Rider REPS, which incorporated the Company's proposed adjustments to its North Carolina retail rates.

On March 11, 2010, the Commission issued an Order Scheduling Hearing, Establishing Discovery Guidelines, and Requiring Public Notice in which it set this matter for hearing; established deadlines for the submission of intervention petitions, intervenor direct 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 Utility Customers Association, Inc. (CUCA); GreenCo Solutions, Inc. (GreenCo); North Carolina Sustainable Energy Association (NCSEA); North Carolina Eastern Municipal Power Agency and North Carolina Municipal Power Agency Number 1 (collectively, Power Agencies); Electricities of North Carolina, Inc.; Blue Ridge Electric Membership Corporation (Blue Ridge EMC); Rutherford Electric Membership Corporation (Rutherford EMC); and the Town of Forest City (Forest City). Each of these petitions to intervene was allowed by the Commission.

On April 6, 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 May 24, 2010, the Commission issued an Order extending the deadlines for the filing of testimony and exhibits and rescheduling the evidentiary hearing for receiving expert witness testimony and exhibits.

On May 26, 2010, Duke filed the revised direct testimony and exhibits of Mr. Smith and Ms. McManeus. On May 28, 2010, the Public Staff filed the testimony of Jay B. Lucas, Engineer, Electric Division, and notice of affidavit and affidavit of Michelle Boswell, Accountant, Accounting Division.

On June 4, 2010, Duke 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 June 8 and 9, 2010. Duke presented the testimony and exhibits of Mr. Smith and Ms. McManeus, and the Public Staff presented the testimony and exhibits of Mr. Lucas and the affidavit of Ms. Boswell.

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

1. Duke is a duly organized limited liability company existing under the laws of the State of North Carolina and 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 the Commission based upon its application filed pursuant to G.S. 62-133.8 and Commission Rule R8-67.

2. The test period and billing period for this proceeding are, respectively, the 12-month period ending December 31, 2009, and the 12-month period ending August 31, 2011.

3. Beginning in the year 2010, energy in an amount equal to at least 0.02% of the previous year's total electric power sold by Duke and the other electric power suppliers in North Carolina to their retail electric customers must be supplied by a combination of new solar electric facilities and certain new metered solar thermal energy facilities. In 2012, this solar set-aside requirement increases to an amount equal to at least 0.07% of the electric power suppliers' previous year's North Carolina retail electric sales. Also in 2012, Duke and the other electric power suppliers must generally supply an amount equal to at least 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 measures. Duke and the other electric power suppliers in North Carolina are required, in the aggregate, by G.S. 62-133.8(e) and (f) to



procure a certain portion of their renewable energy requirements beginning in 2012 from electricity generated by poultry and swine waste.

4. Under G.S. 62-133.8(h), the "incremental costs" of compliance with the REPS requirement may be recovered through the REPS riders. The term "incremental costs," as defined in G.S. 62-133.8(h)(1), includes the costs of compliance with REPS "that are in excess of the electric power supplier's avoided costs." The term "avoided costs" includes both avoided energy costs and avoided capacity costs.

5. Under Commission Rule R8-67(e)(2), the total amount of costs reasonably and prudently incurred during the test period to purchase unbundled RECs constitute incremental costs. The projected costs to purchase such RECs during the billing period constitute forecasted incremental costs.

6. Duke appropriately calculated the avoided costs associated with power purchase agreements and its solar distributed generation program approved in Docket No. E-7, Sub 856 (Solar DG Program) using the inputs and methodology used for its Purchased Power, Schedule PP rates approved in Dockets No. E-7, Subs 106 and 117.

7. Duke calculated the incremental costs associated with its Solar DG Program to be recovered by the prospective REPS rider based upon the levelized revenue requirements to recover the capital and operating costs over the expected life of the solar facilities less the levelized avoided costs and limited by the effective cost submitted by the third-place solar bidder, in a manner generally consistent with the Commission's May 6, 2009 Order on Reconsideration in Docket No. E-7, Sub 856. This calculation provides a reasonable estimate, subject to subsequent true-up, of the incremental Solar DG costs to be incurred by Duke during the billing period.

8. The research activities funded by Duke during the test period are renewable research costs recoverable under G.S. 62-133.8(h)(1)(b). The research costs included in the test period are within the \$1 million annual limit provided in G.S. 62-133.8(h)(1)(b).

9. The incremental costs incurred by Duke for REPS compliance for its North Carolina retail electric customers, and for the wholesale entities for which it is providing REPS compliance services, total \$4,071,784 for the test period. The Company's forecasted incremental costs for REPS compliance for the billing period total \$6,111,683.

10. Duke's incremental costs for REPS compliance during the test period were reasonable and prudently incurred.

11. Duke appropriately calculated the number of its customer accounts pursuant to the method approved by the Commission in its December 15, 2009 Order Approving REPS Riders in Docket No. E-7, Sub 872.

12. Duke has agreed to provide REPS compliance services, including the procurement of renewable energy certificates (RECs), to the following wholesale entities pursuant to G.S. 62-133.8(c)(2)(e): Rutherford EMC, City of Dallas, Forest City, City of Concord, Town of Highlands, and City of Kings Mountain. It is, therefore, necessary to allocate Duke's incremental costs of REPS compliance between Duke's own retail electric customers and the electric customers of these wholesale entities.

13. Duke's North Carolina billing period REPS expense for use in this proceeding is \$3,292,974, \$2,259,489 and \$559,220 for the residential, general service and industrial customer classes, respectively.

14. 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 \$0.17 for residential accounts, \$0.83 for general service accounts, and \$8.32 for industrial accounts.

15. Duke's North Carolina test period REPS expense under-collection was \$1,760,435, \$1,207,930 and \$298,960 for the residential, general service and industrial customer classes, respectively.

16. The appropriate monthly amount of the REPS Experience Modification Factor (EMF) rider per customer account, excluding gross receipts tax and regulatory fee, to be collected during the billing period is \$0.09 for residential accounts, \$0.45 for general service accounts, and \$4.45 for industrial accounts.

17. The combined monthly REPS and REPS EMF rider charges per customer account, adjusted to include gross receipts tax and regulatory fee, to be collected during the billing period are \$0.27 for residential accounts, \$1.32 for general service accounts, and \$13.21 for industrial accounts.

18. 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).

19. In its 2009 REPS compliance report, Duke appropriately credited the wholesale entities for which it provides REPS compliance services for their respective allocations from the Southeastern Power Administration (SEPA). "Allocations" from SEPA is used as a term of art in G.S. 62-133.8(c)(2)(c). As such, a municipal electric power supplier or electric membership corporation (EMC) shall 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).

20. Except as otherwise discussed herein, Duke'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 FINDING OF FACT NO. 2**

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) to be the 12 months ending December 31 of each year for Duke. 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." Due to the fact that the REPS charges approved during the prior year's REPS cost recovery proceeding in Docket No. E-7, Sub 872 did not go into effect until January 1, 2010, the effect of this provision is that all of the Company's reasonable and prudently incurred incremental costs for the test period will be recovered through the REPS EMF rider.

Rule R8-67(e)(4) further 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-7, Sub 934, and in this proceeding, Duke proposed, without objection from any party, that its rate adjustments take effect on September 1, 2010, and remain in effect for a 12-month period. This period was referred to at the hearing as the "billing period."

## **EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 3**

The evidence supporting this finding of fact appears in Duke's application, the testimony of Company witness Smith, and the requirements of G.S. 62-133.8.

Duke witness Smith explained that, under G.S. 62-133.8(b)(1), each electric public utility in the State must comply with the REPS requirement in accordance with a statutorily set schedule beginning in the year 2012 based upon 3% of the utility's North Carolina retail electric sales in the previous year. The schedule escalates to 6% in 2015, 10% in 2018 and 12.5% in 2021 and thereafter. Additionally, beginning with the year 2010, G.S. 62-133.8(d) further requires that each electric public utility satisfy its REPS requirement with solar energy. Like the general REPS obligation, this solar set-aside requires compliance in accordance with a statutorily set schedule beginning in the year 2010 based upon 0.02% of the utility's North Carolina retail electric sales in the previous year. The schedule escalates to 0.07% in 2012, 0.14% in 2015 and 0.20% in 2018 and thereafter.

Smith Exhibit No. 2 provided the Company's forecast as to the amount of resources needed to meet these requirements for the period 2010-2028 for its North Carolina retail customers and the wholesale customers for whom the Company has contracted to provide REPS compliance services consistent with G.S. 62-133.8(c)(2). Witness Smith explained that for the period 2009 through 2012, in particular, the Company's first REPS compliance obligation is the solar set-aside requirement beginning in the year 2010. Witness Smith stated that Duke forecasts that the 0.02% solar set-aside obligation will require 11,211 megawatt-hours (MWh) to be met with solar energy. This 0.02% percent obligation carries through to 2011, with the obligation declining slightly to 10,986 MWh (the requirement is projected to decline slightly based on Duke's sales forecast). In 2012, this solar requirement increases to 0.07% percent of the prior year's North Carolina retail electric sales, which translates into 38,686 MWh. Also in 2012, Duke must procure 3% of its previous year's North Carolina retail electric sales from renewable energy in general. Witness Smith projected that this total renewable energy requirement will equal 1,657,958 MWh.

Company witness Smith described in detail Duke's efforts to comply with the renewable energy requirements of G.S. 62-133.8. Mr. Smith explained that, in executing the strategies set forth in the Company's 2009 REPS compliance plan, filed in Docket No. E-100, Sub 124, Duke has pursued a balanced approach of utilizing (1) existing or new Duke-owned assets; (2) the purchase of energy from renewable energy resources available in the market; (3) the purchase of unbundled renewable RECs from both in-state and out-of-state suppliers; and (4) cost-effective energy efficiency savings, as approved by the Commission in Docket No. E-7, Sub 831, to satisfy its REPS requirements.

Witness Smith described the activities Duke engaged in prior to and during the test period designed to identify renewable energy and REC purchase opportunities and to develop its own renewable energy resources. Specifically, witness Smith stated that during the test period, Duke engaged in numerous activities to identify, develop, and procure renewable energy and RECs to allow the Company to meet its REPS statutory compliance obligations, including (1) initiating its implementation of its Solar Distributed Generation Program (Solar DG Program), pursuant to the certificate of public convenience and necessity issued in Docket No. E-7, Sub 856; (2) purchasing energy and RECs pursuant to existing and new power purchase agreements (PPAs) with renewable energy facilities; (3) purchasing in-state and out-of-state unbundled RECs; (4) exploring research and development opportunities to enhance Duke's ability to comply with its REPS obligations, including testing and assessing co-firing and repowering capabilities for existing Company-owned fossil generation assets with woody biomass fuels; (5) implementing certain energy efficiency programs that will generate results that can be counted towards the Company's REPS obligations; and (6) initiating efforts to construct up to three offshore wind demonstration turbines in the eastern Pamlico Sound under an agreement with the University of North Carolina.

Witness Smith further testified that Duke continues to accept proposals for bundled and unbundled PPAs and REC supply agreements through its open unsolicited bid and standard offer programs. Witness Smith also stated that Duke continues to

procure low cost, out-of-state RECs as a component of its compliance portfolio. According to witness Smith, Duke is currently negotiating additional energy and REC proposals and expects to sign certain additional agreements in the near future.

With respect to the upcoming statewide aggregate swine and poultry waste set-aside obligations, witness Smith stated that Duke has taken specific steps to secure relevant resources by (1) joining with the other electric power suppliers to develop and issue the statewide request for proposals (RFP) for swine waste resources that was recently approved by the Commission in Docket No. E-100, Sub 113; (2) engaging in direct negotiations with multiple power suppliers regarding bundled power supply and REC purchase agreements from proposed poultry waste generation facilities and REC purchase agreements from proposed swine waste generation facilities; and (3) exploring research and development projects relating to innovative swine and poultry waste generation technologies. Witness Smith also acknowledged that the Commission has clarified, through its March 31, 2010 Order on Pro Rata Allocation of Aggregate Swine and Poultry Waste Set-aside Requirements and Motion for Clarification in Docket No. E-100, Sub 113, the respective obligations of the electric power suppliers with respect to the statewide aggregate set-aside requirements, such that each supplier's obligation is limited to its pro rata allocation of such statewide requirements based upon a load-based ratio share methodology. Despite this helpful clarification, witness Smith reiterated that *the swine and poultry waste requirements remain challenging due to the scarcity of proven suppliers of those resources*. Witness Smith also stated that there are uncertainties relating to both swine and poultry waste resources, but that the Company felt more comfortable with its ability to achieve the megawatt-hour targets for the poultry waste set-aside requirement due to the Company's assessment of the proposals submitted by developers of poultry resources. Witness Smith specified that in the case of the swine waste set-aside requirement, the uncertainties related primarily to the scarcity of proven suppliers and the actual number of viable proposals to meet the REPS set-aside requirements. The electric power suppliers remain in the process of executing the approved joint swine waste RFP, and that the RFP process will reveal whether sufficient viable resources exist that will enable the electric power suppliers to collectively meet the aggregate statewide requirements.

On cross-examination, witness Smith stated that the Company had also entered into approximately twenty (20) contracts under its standard offer program. Witness Smith explained that the standard offer program is targeted to smaller power producers that have an interest in selling RECs, but that are too small for the Company to dedicate significant time to negotiate specific terms and conditions with each producer. Witness Smith also testified that the standard offer was open to resources meeting the general REPS requirements, as well as solar photovoltaic and solar thermal resources.

Witness Smith also emphasized the importance of balance to Duke's renewable energy portfolio, as well as the overall strategic importance of renewable energy resources to the Company's generation mix. Mr. Smith stated that the Company's intent was not to drive toward specific percentages of Company-owned versus third-party resources for REPS compliance. Duke values the ability to develop competencies in the generation and delivery of renewable energy, and to take advantage of opportunities to

cost-effectively use existing resources to produce renewable energy, through applications like co-firing. With respect to both Company-owned solar and biomass assets, witness Smith clarified that such assets would only provide a percentage of the total solar set-aside and general REPS requirements, respectively, on an annual basis, with the remainder of the requirements being satisfied through purchases from third-party suppliers of qualifying resources.

In response to questions from the Commission, witness Smith testified that cost-effectiveness can be optimized through execution of its balanced approach and that the Company believes that, within the context of Senate Bill 3, it has a responsibility to its customers to manage the costs that it pays for compliance resources. Witness Smith also stated that Duke currently forecasts being able to meet its REPS obligations without hitting the statutory cost caps, but that certain factors, like the ability to use wood biomass and cost-effectively procure swine and poultry waste resources, may impact the Company's ability to comply without hitting the caps.

The Commission concludes that Duke has diligently pursued its REPS obligations in acquiring a portfolio of RECs from existing or new Duke-owned assets, the purchase of energy from renewable energy resources available in the market, the purchase of RECs, and the implementation of energy efficiency programs. As witness Smith testified, however, at least one issue remains outstanding at this time, that regarding the use of non-waste woody biomass for electric generation. This issue is pending in the registration of Duke's Buck and Lee Steam Stations, Docket No. E-7, Subs 939 and 940, and the validity of such biomass RECs claimed by Duke for REPS compliance will be determined by the decision in that registration proceeding.

#### **EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 4-10**

The evidence supporting these findings of fact appears in Duke's application, in the affidavit of Public Staff witness Boswell, and in the testimony and exhibits of Duke witnesses Smith and McManeus and Public Staff witness Lucas.

Duke witness McManeus testified regarding the calculation of Duke's incremental costs of compliance with the REPS requirements based on the incurred and projected costs provided by witness Smith. 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. Ms. McManeus stated that in all cases where Duke has determined incremental compliance costs as the excess amount above avoided cost, it has applied an avoided cost rate in cents per kilowatt-hour to the expected number of kilowatt-hours of renewable energy for each compliance initiative.

Revised McManeus Exhibit No. 2 identifies Duke's incremental costs for REPS compliance as \$4,071,784 for the test period, which has been broken down for purposes of this proceeding into component periods as follows: \$804,458 during the update period from January to April 2009 and \$3,267,326 during the EMF period from

May to December 2009 (which includes an adjustment resulting from additional incremental costs incurred during the 2009 update period). The Company's forecasted incremental costs for REPS compliance for the billing period total \$6,111,683.

Witness McManeus explained that, in determining the avoided costs associated with power purchase agreements, the Company applied Commission Rule R8-67(a)(2) and, thus, used Duke's approved avoided cost rates set forth in its Purchased Power Non-Hydroelectric, Schedule PP-N, and Purchased Power Hydroelectric, Schedule PP-H, rate schedules (collectively, Schedule PP). For power purchase agreements that have been executed, the Company used annualized combined capacity and energy rates set forth in the Company's Exhibit 3 filed in Docket No. E-100, Sub 106. Because the duration of the power purchase agreements did not closely match that for which rates were established in the avoided cost proceeding (i.e., 2, 5, 10 or 15 year durations), Duke computed avoided cost rates for the particular term of the power purchase agreements using the same inputs and methodology used for the Schedule PP rates approved in Docket No. E-100, Sub 106.

For power purchase agreements that have not yet been executed, Ms. McManeus testified that Duke based its avoided costs on the methodology used for the Schedule PP rates approved on May 13, 2009, in Docket No. E-100, Sub 117. The duration of power purchase agreements under negotiation likewise did not closely match that for which rates are proposed in the ongoing avoided cost proceeding (i.e., 2, 5, 10 or 15 year durations). Therefore, Duke similarly computed avoided cost rates for the particular term of pending power purchase agreements using the same inputs and methodology used for the Schedule PP rates approved in Docket No. E-100, Sub 117.

Witness McManeus further explained that the Company determined the avoided costs for its Solar DG Program using a process similar to that described above for a power purchase agreement with a non-standard duration. The inputs and methodology used for the Schedule PP rates approved in Docket No. E-100, Sub 117 were used to determine the annualized combined capacity and energy rates for a 25-year term, corresponding to the expected life of the solar facilities. The revenue requirements to recover the capital and operating costs of the Solar DG Program were levelized, and then reduced by avoided costs to determine incremental costs. Ms. McManeus further stated that the incremental costs for which the Company seeks recovery through the REPS rider have been limited in compliance with the Commission's May 6, 2009 Order on Reconsideration in Docket No. E-7, Sub 856.

Witness McManeus also included in her calculation of incremental costs the funding of research activities recoverable in accordance with G.S. 62-133.8(h)(1)(b), and incremental administration costs incurred in order to comply with REPS requirements discussed by witness Smith. She stated that requested recovery of research expenditures is within the \$1 million annual limit stated in G.S. 62-133.8(h)(1)(b).

Consistent with Rule R8-67(e)(2), which provides that the cost of an unbundled REC "is an incremental cost and has no avoided cost component," Ms. McManeus included the total amount of costs incurred during the test period for REC purchases in

incremental costs. Further, the projected costs for REC purchases discussed by witness Smith during the prospective and forecast periods are included as incremental costs.

Duke witness Smith discussed the Company's research and development activities related to its continuing testing and assessments of co-firing and repowering capabilities for existing Company-owned fossil generation assets with woody biomass fuel. He also testified that Duke continues to explore numerous other opportunities to engage in research and development activities to enhance the Company's ability to comply with its REPS obligations. Revised Smith Confidential Exhibit 3 also reflects other incremental costs associated with REPS compliance, such as costs associated with administering its renewable RFP and certain internal labor costs attributable to REPS compliance activities. Mr. Smith also reiterated that any and all just and reasonable costs associated with the coastal wind demonstration project, authorized by Session Law 2009-451, will not be recovered pursuant to G.S. 62-133.8(h), but rather will be recovered through a separate rider pursuant to the procedures set forth in the enabling statute. As such, no costs incurred relating to the development and construction of the coastal wind demonstration project will count against the statutory per-account cost caps for REPS compliance, as calculated pursuant to G.S. 62-133.8(h)(3).

Public Staff witness Boswell confirmed through her filed affidavit that the Public Staff's investigation included procedures to evaluate whether the Company properly determined its per-book incremental compliance costs and the annual revenue cap. These procedures included a review of the specific types of expenditures impacting the Company's costs, including research costs. She stated that performing the Public Staff's investigation required review of numerous responses to written and verbal data requests. Public Staff witness Boswell did not disagree with the Company's aggregate incremental costs for the test period, and she stated that the Public Staff recommended that Duke's monthly REPS EMF rider be approved in the amounts set forth in Revised McManeus Exhibit 2.

Mr. Lucas also did not take issue with the reasonableness of the incremental REPS compliance costs incurred during the test period, but he did make specific recommendations with respect to the treatment of certain costs incurred by Duke during the test and billing periods. Mr. Lucas noted that, in its revised testimony and exhibit filing on May 26, 2010, Duke amended its classification of its costs of the co-firing testing at Buck and Lee Steam Stations during the test period (specifically during the EMF period) to have those costs recovered as "research and development costs." Witness Lucas testified that the Public Staff agreed with this classification and that the costs of the co-firing testing at Buck and Lee should be recovered as "research and development costs." Mr. Lucas also noted that Duke has developed an internal REC tracking system to account for cost, tax implication information and generation data for the RECs purchased and generated by the Company. Witness Lucas stated that Duke had indicated to the Public Staff that the system will manage 5 to 6 million RECs by 2013 and the Company plans to interface its internal system with the North Carolina Renewable Energy Tracking System (NC-RETS). Witness Lucas stated that the Public Staff agreed with Duke's proposal to amortize the costs of the system over five years.



However, he recommended that the Commission reserve the right to adjust the allowable cost of the tracking system based on its actual performance.

Mr. Lucas further testified that 81% of the development costs of the internal REC tracking system have been allocated to Duke based on the projected amount of RECs on the system that will belong to the Company. Duke Energy Ohio and Duke Energy Retail Services (an unregulated affiliate of Duke that provides retail service to customers in Ohio) have been allocated 15% and 4% of the development costs, respectively, based on their projected REC totals to be tracked on the system. Witness Lucas recommended that Duke's North Carolina customers receive a fair compensation for the development costs of the tracking system for which they have already paid if in the future the tracking system is used to track RECs for other Company affiliates, regulated or unregulated, or for customers in states other than North Carolina and Ohio. Public Staff witness Lucas testified, therefore, that, based on the Public Staff's investigation of Duke's projected incremental costs for the billing period, the Company's monthly REPS rider should also be approved in the amounts set forth in Revised McManeus Exhibit 2.

All of the evidence presented demonstrates that Duke appropriately calculated its incremental REPS compliance costs for the test period, that its incremental costs for REPS compliance during the test period were reasonable and prudently incurred, and that it provided a reasonable estimate, subject to subsequent true-up, of its incremental REPS compliance costs for the billing period. The Commission further finds that, if Duke's internal REC tracking system is used to track RECs for Company regulated or unregulated affiliates other than Duke Energy Ohio and Duke Energy Retail Services, Duke's North Carolina customers shall receive fair compensation for the development costs of the tracking system for which they have already paid.

#### EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 11-18

The evidence supporting these findings of fact appears in Duke's application, in the affidavit of Public Staff witness Boswell, and in the testimony and exhibits of Duke witness McManeus and Public Staff witness Lucas.

Duke witness McManeus set forth the detailed calculation of the REPS rider associated with each customer class in Revised McManeus Exhibit No. 2. The total actual and projected incremental costs to comply with G.S. 62-133.8 for the test period, update period and billing period were summed. Each customer class was then allocated its share of the actual and projected incremental costs, as shown in Revised McManeus Exhibit No. 2, based on its pro rata share of the customer cost caps defined in G.S. 62-133.8. Ms. McManeus explained that, to calculate the pro rata shares, Duke used the number of accounts by customer class at the end of the test period. The resulting number of accounts for each class was multiplied by the per-account annual charges defined in G.S. 62-133.8 to calculate the caps by customer class and in the aggregate. Duke then allocated to each customer class its share of incremental costs based on the customer class's pro rata share of the aggregate cost cap. The cost allocated to each customer class was then divided by the number of customer accounts

as of the end of the test period within each customer class to arrive at the total annual cost to be recovered from each account. The monthly North Carolina retail REPS rider for each customer class was then calculated as one-twelfth of the total annual cost.

Ms. McManeus explained that Duke calculated its number of customer accounts pursuant to the method approved in the Commission's December 15, 2009 Order Approving REPS Riders in Docket No. E-7, Sub 872. The Company defines "account" as an "agreement," or "tariff rate," between Duke and a customer in order to determine the per-account REPS charge with certain exceptions, which are listed below. The excepted agreements or service schedules are not considered accounts for purposes of the per-account charge because of the near certainty that customers served under these schedules already will pay a per-account charge under another residential, general service, or industrial service agreement or because they represent small auxiliary service loads. The following agreements fall within this exception:

- Outdoor Lighting Service (Schedule OL)
- Floodlighting Service (Schedule FL and FL-N)
- Street and Public Lighting Service (Schedule PL)
- Yard Lighting (Schedule YL)
- Governmental Lighting (Schedule GL)
- Nonstandard Lighting (Schedule NL)
- Off-Peak Water Heating (Schedule WC is a sub-metered service)
- Non-demand metered, nonresidential service, provided on Schedule SGS, at the same premises, with the same service address, and with the same account name as an agreement for which a monthly REPS charge has been applied.

Ms. McManeus also stated that the Company's incremental cost of REPS compliance represents the cost to meet the combined total megawatt-hour requirement based on the sum of Duke's North Carolina retail sales and the North Carolina retail sales for wholesale customers that contract with the Company for services to meet the REPS requirements, including delivery of renewable energy resources and compliance planning and reporting in accordance with G.S. 62-133.8(c)(2)(e). In order to properly allocate incremental costs between Duke and these wholesale customers, Ms. McManeus utilized the class allocation methodology discussed above using a combined aggregate cost cap. The combined total numbers of accounts at year end by customer class for both Duke's North Carolina retail accounts and the wholesale customers' North Carolina retail accounts were multiplied by the per account charges to determine combined total cost cap amounts by customer class and in total.

Witness McManeus detailed that Rutherford EMC, Forest City, and the City of Concord have proposed a methodology for determining year-end number of accounts that is generally consistent with that proposed by Duke. The modifications and exclusions proposed are similarly intended to avoid charging customers twice, as in the case of customers with additional lighting accounts, or to exclude small auxiliary service loads. The Town of Highlands, the City of Dallas, and the City of Kings Mountain

propose to define an account in the manner the information is reported to the Energy Information Administration for annual electric sales and revenue reporting.

Ms. McManeus further explained that in the case where a wholesale customer has chosen to self-supply a portion of its annual REPS megawatt-hour requirement (for example, using its SEPA allocation to partially meet the requirement as provided in G.S. 62-133.8(c)), the combined total number of customer accounts on which the cost allocation is based was adjusted on a pro rata basis to recognize that a portion of the compliance requirement will not be supplied through Duke. Ms. McManeus stated that this method of allocation results in the same cost per customer account for both Duke and the wholesale entities.

Using this methodology, Revised McManeus Exhibit 2 identifies the REPS compliance costs for which the Company seeks recovery through its proposed REPS rider and its proposed EMF amount, separated into several time periods. Revised McManeus Exhibit 2 shows the total REPS Rider amounts proposed including the EMF, by customer class, compared to the cost cap for each customer class. These exhibits demonstrate that the monthly amounts for the REPS riders (excluding gross receipts tax and regulatory fee) per customer account as \$0.17 for residential accounts; \$0.83 for general service accounts; and \$8.32 for industrial accounts. These exhibits show that based upon the Company's North Carolina test period REPS expense under-collections of \$1,760,435, \$1,207,930 and \$298,960 for the residential, general service and industrial customer classes, respectively, the monthly amounts of the REPS EMF riders (excluding gross receipts tax and regulatory fee) per customer account to be collected during the billing period are \$0.09 for residential accounts; \$0.45 for general service accounts; and \$4.45 for industrial accounts. Together, the total monthly amount of the REPS riders (excluding gross receipts tax and regulatory fee) per customer account to be billed during the 2010-2011 billing period are \$0.26 for residential accounts (including the low usage non-residential accounts classified as residential); \$1.28 for general service accounts; and \$12.77 for industrial accounts. Adjusted to include gross receipts tax and regulatory fee, the combined monthly REPS and REPS EMF rider charges per customer account to be collected during the billing period are \$0.27 for residential accounts, \$1.32 for general service accounts, and \$13.21 for industrial accounts. As shown in Revised McManeus Exhibit No. 2, the annual charges for each customer class are below the caps as defined in G.S. 62-133.8.

All of the evidence presented supports the conclusion that Duke's calculation of its REPS and EMF Riders was reasonable and appropriate. Duke has also appropriately calculated its year-end number of customer accounts, pursuant to terms of the December 15, 2009 Order Approving REPS Riders issued in Docket No. E-7, Sub 872.

#### **EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 19-20**

The evidence supporting these findings of fact appears in Duke's 2009 REPS compliance report, the exhibits and testimony of Duke witness McManeus and the testimony of Public Staff witness Lucas.

On March 2, 2010, Duke filed its 2009 REPS compliance report, which set forth the information required by Rule R8-67(c)(1) and described the Company's methodology for determining its number of customer accounts and its annual cap on incremental REPS compliance costs under G.S. 62-133.8. Duke filed a revised 2009 REPS compliance report on May 26, 2010.

Public Staff witness Lucas testified that he had reviewed Duke's 2009 REPS compliance report and that, aside from an issue relating to the number of SEPA RECs calculated by the Company, the report complied with the requirements of Rule R8-67(c)(1) for both the Company and the wholesale customers for which it provides REPS compliance services. Witness Lucas further stated that his review of the compliance report was limited to factual issues and did not extend to legal issues such as those currently pending in Docket No. E-7, Subs 939 and 940, relating to the use of whole trees as fuel.

With respect to the issue he had identified relating to the reporting of SEPA RECs, Public Staff witness Lucas testified that the bills received by Duke's wholesale customers from SEPA separately identify the sources of power provided by SEPA each month as stream flow, pumping operations or replacement energy. Stream flow energy is energy generated from SEPA's traditional hydroelectric generation; pumping operations energy is energy generated from water released by SEPA's pumped storage facilities; and replacement energy is energy purchased by SEPA to meet its contractual obligations to its customers when its own resources are insufficient. The Public Staff argues that the power from pumping operations and replacement energy supplied by SEPA to Duke's wholesale customers do not constitute "electric power from a renewable energy facility or a hydroelectric power facility" within the meaning of this paragraph and may not be used to satisfy the REPS requirement.

Under cross-examination, Mr. Lucas acknowledged that the term "allocation" is a term of art within the industry and that it is being used in the industry context in G.S. 62-133.8(c)(2)(c). According to Mr. Lucas, the term "allocations" in the PPAs between SEPA and the relevant North Carolina municipalities and EMCs refers to the percentage of power from the various SEPA generation facilities to which the municipality or cooperative is entitled to receive power under its PPA. SEPA monthly invoices, as illustrated by Lucas Cross Exhibit No. 4, set forth the particular purchaser's pro rata share of the total costs of all of the deliveries made in the previous month based on the purchaser's contractual allocation of the total portfolio of energy delivered in that prior month to all of SEPA's customers, and it allocates each purchaser's share of the costs among the three sources of generation used to produce the delivered energy – streamflow, pumped storage and replacement energy.

Duke and the municipal and EMC intervenors emphasize that G.S. 62-133.8(c)(2)(c) authorizes municipalities and EMCs to meet a portion of their respective REPS requirements through the:

Purchase of 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. [Emphasis added.]

As is well established in North Carolina, "[s]tatutory 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) (citations omitted). 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 Comm'n v. Edmisten, 291 N.C. 451, 465, 232 S.E.2d 184, 192 (1977) (citations omitted).

Duke and the other intervenors argue that the plain language of the statute indicates that the SEPA allocation may be used to meet REPS requirements and does not indicate, as Public Staff recommends, that only a certain portion or percentage of the allocation may be used. Although the phrase "including allocations made by the Southeastern Power Administration" follows the use of "hydroelectric power" in the statutory clause, there is no further statutory language that explicitly limits the portions of the "allocations made by the Southeastern Power Administration" to any of the component elements of the "allocations." "Allocation" has a specific connotation in the context of both the statute and the contracts between SEPA and its customers, and to interpret the term differently in the context of Senate Bill 3 would essentially write the word "allocation" out of the statute. If the General Assembly intended to qualify the term "allocation" to merely allow certain portions of that "allocation" to be used for REPS compliance purposes, the language in the statute would have clearly stated that only that portion of the "allocation" from SEPA directly attributable to stream flow energy could be used to satisfy the REPS requirements of North Carolinas' municipalities and EMCs. G.S. 62-133.8(c)(2)(c) does not include such qualifying or limiting language, and to interpret the statute to include such language would contravene established North Carolina case law.

For the reasons argued by Duke and the EMC and municipal intervenors in this proceeding, the Commission finds and concludes that the plain language of G.S. 62-133.8(c)(2)(c) dictates that the total amount of energy purchased by a municipality or EMC pursuant to its "allocation from the Southeastern Power Administration" is eligible to be used for compliance with the purchasing municipality's or EMC's REPS requirements, subject to the thirty percent limitation provided in G.S. 62-133.8(c)(2)(c). The term "allocation" is a term of art in this context and the General Assembly is presumed to have used it as such in the statute. Therefore, the SEPA RECs included in Duke's revised 2009 REPS compliance report were appropriately calculated. Except as otherwise discussed herein regarding issues outstanding in other dockets, Duke's revised 2009 REPS compliance report should be approved.

IT IS, THEREFORE, ORDERED as follows:

1. That Duke shall establish a REPS Rider as described herein, in the amounts approved herein, and this rider shall remain in effect for a 12-month period beginning on September 1, 2010, and expiring on August 31, 2011;
2. That Duke shall establish a 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 September 1, 2010, and expiring on August 31, 2011;
3. That Duke shall file appropriate rate schedules and riders with the Commission in order to implement the provisions of this Order no later than 10 days from the date of this Order;
4. That Duke shall work with the Public Staff to prepare a joint notice to customers giving notice of the rate changes ordered by the Commission in Docket No. E-7, Subs 934 and 936, and Duke shall file such notice for Commission approval no later than 5 days from the date of this Order; and
5. That, except as otherwise discussed herein, Duke's 2009 REPS compliance report is approved.

ISSUED BY ORDER OF THE COMMISSION.

This the 13<sup>th</sup> day of August, 2010.

NORTH CAROLINA UTILITIES COMMISSION

*Gail L. Mount*

Gail L. Mount, Deputy Clerk

Sw081310.01

Renewable Energy Facility Registrations  
Accepted by the North Carolina Utilities Commission  
(as of September 30, 2010)

Facility Name	Location	Primary Fuel	Size (kW)
<b><u>New Renewable Energy Facilities (G.S. 62-133.8(a)(5))</u></b>			
Keil QF	NC	Biomass	2
Orbit Energy Charlotte Facility	NC	Biomass - Biogas	3,200
Perdue Agribusiness	NC	Biomass - Cogen	375
Peregine -- Hartsville Paper	SC	Biomass - Cogen	50,000
Black Creek Renewable Energy, LLC	NC	Biomass - Landfill Methane	25,600
Charlotte Motor Sp. Landfill	NC	Biomass - Landfill Methane	5300
Charlotte Motor Sp. Landfill	NC	Biomass - Landfill Methane	10,400
Davidson County Landfill	NC	Biomass - Landfill Methane	1,600
Durham City Landfill Gas	NC	Biomass - Landfill Methane	3,180
Enoree Landfill	SC	Biomass - Landfill Methane	3,200
INGENCO	NC	Biomass - Landfill Methane	4,000
Iredell County Landfill	NC	Biomass - Landfill Methane	4,500
Piedmont Landfill	NC	Biomass - Landfill Methane	2,400
Collins Chick Farm	SC	Biomass - Poultry Methane	1,628
Orbit Energy Clinton Facility	NC	Biomass - Swine waste	1,628
Coastal Carolina Clean Power	NC	Biomass - Wood Waste	32,000
Craven County Wood	NC	Biomass - Wood Waste	45,000
Epcor -- Roxboro	NC	Biomass - Wood Waste	47,000
Epcor -- Southport	NC	Biomass - Wood Waste	86,000
Aquenergy -- Piedmont	SC	Hydroelectric	1,000
Aquenergy -- Ware Shoals	SC	Hydroelectric	5,800
Avalon Hydropower Project	NC	Hydroelectric	1,155
Boys Mill Hydroelectric Project	SC	Hydroelectric	1,500
Caroleen Mills Hydro	NC	Hydroelectric	1,500
Cliffside Mills	NC	Hydroelectric	1,600
Coleridge Hydroelectric Plant	NC	Hydroelectric	400
Cox Lake Hydroelectric	NC	Hydroelectric	4,300
Deep River Hydro Plant	NC	Hydroelectric	400
Franklinville Hydroelectric Plant	NC	Hydroelectric	420
Haw River Hydro	NC	Hydroelectric	1,500
High Falls Dam	NC	Hydroelectric	650
High Shoals Hydroelectric	NC	Hydroelectric	1,800
Hollidays Bridge Dam	SC	Hydroelectric	4,200
Inman Mills	SC	Hydroelectric	2,000
Lake Lure Hydro Plant	NC	Hydroelectric	3,400
Lake Upchurch	NC	Hydroelectric	800
Little River Dam	NC	Hydroelectric	700
Lockville Hydro Electric	NC	Hydroelectric	1,500
Lower Pelzer	SC	Hydroelectric	3,300
Mayo Hydropower Project	NC	Hydroelectric	951
Pharr Yarns Hydro	NC	Hydroelectric	900
Pickens Mill	NC	Hydroelectric	600

Facility Name	Location	Primary Fuel	Size (kW)
<b><u>New Renewable Energy Facilities (G.S. 62-133.8(a)(5))</u></b>			
Rocky Mount Mill	NC	Hydroelectric	1000
Rocky River Hydroelectric	NC	Hydroelectric	235
Saluda Hydroelectric Project	SC	Hydroelectric	2,400
South Yadkin	NC	Hydroelectric	1,600
Spencer Mountain Hydro	NC	Hydroelectric	560
Spray Cotton Mills	NC	Hydroelectric	500
Turner Shoals Hydroelectric Pro	NC	Hydroelectric	5,500
Upper Pelzer	SC	Hydroelectric	2,200
Ward Mill Dam	NC	Hydroelectric	168
1529 Properties	NC	Solar Photovoltaic	50
28 Schench Parkway, Asheville	NC	Solar Photovoltaic	80
AGT Retail Solar Plant 1	NC	Solar Photovoltaic	250
Arden Solar, LLC	NC	Solar Photovoltaic	225
Barbara & Bernhard Cordts	NC	Solar Photovoltaic	50
Bayer CropScience	NC	Solar Photovoltaic	24
Bend of Ivy Lodge	NC	Solar Photovoltaic	8
Blue Ridge Paper Solar	NC	Solar Photovoltaic	1,000
BSH Progress Solar 1, LLC	NC	Solar Photovoltaic	1,200
Caroline M. Escobar	NC	Solar Photovoltaic	3
Chapel Hill Tire Co.	NC	Solar Photovoltaic	16
Conrad Industries	NC	Solar Photovoltaic	250
Costco -- Chula Vista 781	CA	Solar Photovoltaic	500
Costco -- Culver City 479	CA	Solar Photovoltaic	500
Costco -- Goleta 474	CA	Solar Photovoltaic	500
Costco -- La Habra 777	CA	Solar Photovoltaic	500
Costco -- Mission Valley 488	CA	Solar Photovoltaic	500
Costco -- Poway 775	CA	Solar Photovoltaic	500
Costco -- San Luis Obispo 741	CA	Solar Photovoltaic	500
Costco -- Simi Valley 128	CA	Solar Photovoltaic	500
Costco -- Westlake Village 117	CA	Solar Photovoltaic	500
Deltec Homes	NC	Solar Photovoltaic	55
Duke Solar -- Charlotte	NC	Solar Photovoltaic	532
Duke Solar -- Charlotte	NC	Solar Photovoltaic	50
Duke Solar -- Greensboro	NC	Solar Photovoltaic	1,495
Duke Solar -- Mount Holly	NC	Solar Photovoltaic	1,172
Duke Solar -- Salisbury	NC	Solar Photovoltaic	1,292
Elevated Expectations, LLC	NC	Solar Photovoltaic	18
EM Johnson Water Treatment Pl	NC	Solar Photovoltaic	204
Execelon City Solar	IL	Solar Photovoltaic	10,000
Genworth Building	NC	Solar Photovoltaic	20
GM Fontana Solar PV	CA	Solar Photovoltaic	951
Greenfield Power GTP One, LLC	NC	Solar Photovoltaic	200
GSA Sacramento Solar PV	CA	Solar Photovoltaic	566
Hamlin Family	NC	Solar Photovoltaic	107
Jackson & Sons Warehouse	NC	Solar Photovoltaic	25



Facility Name	Location	Primary Fuel	Size (kW)
<b><u>New Renewable Energy Facilities (G.S. 62-133.8(a)(5))</u></b>			
Jim Barkley Toyota	NC	Solar Photovoltaic	75
Jonathan Brinton	NC	Solar Photovoltaic	5
Kawneer Alcoa Solar PV	CA	Solar Photovoltaic	529
Kublickis & Lestaro	NC	Solar Photovoltaic	5
Landfair Farms	NC	Solar Photovoltaic	30
Layne & Deberry, LLC	NC	Solar Photovoltaic	10
Mayfair Plaza	NC	Solar Photovoltaic	250
MegaWatt Solar	NC	Solar Photovoltaic	50
Megawatt Solar / Piedmont	NC	Solar Photovoltaic	40
Milliken/Solar Showcase Site	SC	Solar Photovoltaic	249
Mission Viejo Solar	CA	Solar Photovoltaic	175
Nash County Community College	NC	Solar Photovoltaic	220
OFM, Inc.	NC	Solar Photovoltaic	250
PE Sutton Plant	NC	Solar Photovoltaic	1,200
Person County Solar Park	NC	Solar Photovoltaic	500
POM Progress Solar I, LLC	NC	Solar Photovoltaic	793
QVC Rocky Mount	NC	Solar Photovoltaic	1,070
Ron Frazier	NC	Solar Photovoltaic	4
SAS Institute, Inc.	NC	Solar Photovoltaic	1,200
SAS Solar	NC	Solar Photovoltaic	1,000
Semprius, Inc.	NC	Solar Photovoltaic	5
SJUSD Allen Elem at Steinbeck Solar	CA	Solar Photovoltaic	422
SJUSD Bret Harte Solar	CA	Solar Photovoltaic	393
SJUSD Burnett Solar	CA	Solar Photovoltaic	147
SJUSD Castillero	CA	Solar Photovoltaic	231
SJUSD Central Kitchen Solar	CA	Solar Photovoltaic	307
SJUSD Corp Yard Solar	CA	Solar Photovoltaic	172
SJUSD Gunderson Solar	CA	Solar Photovoltaic	662
SJUSD John Muir Solar	CA	Solar Photovoltaic	410
SJUSD Leland Solar	CA	Solar Photovoltaic	487
SJUSD Lincoln Solar	CA	Solar Photovoltaic	498
SJUSD Pioneer Solar	CA	Solar Photovoltaic	439
SJUSD SJ Academy Solar	CA	Solar Photovoltaic	420
SJUSD Willow Glen Solar	CA	Solar Photovoltaic	827
Solar Star North Carolina I, LLC	NC	Solar Photovoltaic	1,000
SunE DEC1	NC	Solar Photovoltaic	18,000
TD Burgess, Sr Revocable Trust	NC	Solar Photovoltaic	20
Wilson Community College	NC	Solar Photovoltaic	16
Alleghany Inn	NC	Solar Thermal	NA
Arby's # 1628	NC	Solar Thermal	NA
Arby's # 6659	NC	Solar Thermal	NA
Arby's # 6863	NC	Solar Thermal	NA
Arby's # 7961	NC	Solar Thermal	NA
Biltmore Park Hilton	NC	Solar Thermal	NA
Camp Lejeune Marine Corps Base	NC	Solar Thermal	NA

Facility Name	Location	Primary Fuel	Size (kW)
---------------	----------	--------------	-----------

**New Renewable Energy Facilities (G.S. 62-133.8(a)(5))**

Fletcher Business Park	NC	Solar Thermal	NA
Friends Homes, 6100 W Friendly Rd	NC	Solar Thermal	NA
Friends Homes, 925 New Garden Rd	NC	Solar Thermal	NA
Kanuga Conferences, Inc	NC	Solar Thermal	NA
Mars Hill College	NC	Solar Thermal	NA
Nash Johnson and Sons' Farms, Inc.	NC	Solar Thermal	NA
Nomad Aquatics & Fitness	NC	Solar Thermal	NA
Proximity Hotel	NC	Solar Thermal	NA
SAS Building G	NC	Solar Thermal	NA
SAS Building T	NC	Solar Thermal	NA
YWCA Asheville	NC	Solar Thermal	NA
Barton Chapel Wind Farm	TX	Wind	120,000
Camp Springs	TX	Wind	130,500
Camp Springs II Energy Center	TX	Wind	120,000
Capricorn Ridge Wind	TX	Wind	550,000
Champion Wind Farm	TX	Wind	125,000
JD Wind 10, LLC	TX	Wind	10,000
JD Wind 4, LLC	TX	Wind	79,800
JD Wind 9, LLC	TX	Wind	10,000
Lone Star Wind Farm, Phase II	TX	Wind	200,000
Madison High School	NC	Wind	2
Madison Middle School	NC	Wind	2
McAdoo Wind Energy Center	TX	Wind	150,000
Penascal Wind Farm	TX	Wind	201,600
Pioneer Prairie Wind Farm	IA	Wind	300,000
Roscoe Wind Farm	TX	Wind	209,000
Smoky Hills Wind Project II, LLC	TX	Wind	148,500
Stanton Wind Energy Center	TX	Wind	120,000
Story Wind Farm	IA	Wind	150,000
Tatanka Wind Farm	ND/SD	Wind	180,000
Turkey Track Wind Energy Center	TX	Wind	169,500

**Renewable Energy Facilities (G.S. 62-133.8(a)(7))**

Riegelwood Mill	NC	Biomass - Cogen	60,000
Salem Energy Systems	NC	Biomass - Landfill Methane	4875
Duke -- Bear Creek	NC	Hydroelectric	9,000
Duke -- Bryson	NC	Hydroelectric	1,000
Duke -- Cedar Cliff	NC	Hydroelectric	6,000
Duke -- Queens Creek	NC	Hydroelectric	1,000
Duke -- Tennessee Creek	NC	Hydroelectric	10,000
Duke -- Tuckasegee	NC	Hydroelectric	3,000
French Broad -- Capitola Hydroplant	NC	Hydroelectric	3,000