

# State of North Carolina

FILED OCT 0 1 2009

Clerk's Office N.C. Utilities Commission

E-100 SUB 113

Hilities Commission

Raleigh, NC 27699-4325

COMMISSIONERS EDWARD S. FINLEY, JR., Chairman

October 1, 2009

COMMISSIONERS ' WILLIAM T. CULPEPPER. III **BRYAN E. BEATTY** SUSAN'W. RABON TONOLA D. BROWN-BLAND

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

ROBERT V. OWENS, JR.

LORINZO L. JOYNER

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 2009 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(i).

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,

Elund S. Finds in Edward S. Finley, Jr.

Chairman

ESF/LSW

www.ncuc.net

Copies of the <u>Annual Report of the North Carolina Utilities Commission Regarding Renewable Energy and Energy Efficiency Portfolio Standard in North Carolina</u> have been mailed or hand delivered 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

Mr. Larry E. Shirley, 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

State Environmental Review Clearinghouse

# **TABLE OF CONTENTS**

EXECUTIVE SUMMARY	
•	
BACKGROUND	11
COMMISSION IMPLEMENTATION	12
Rulemaking Proceeding	12
Renewable Energy Facilities	17
Net Metering	18
REC Tracking	19
Environmental impacts	20
ELECTRIC POWER SUPPLIER COMPLIANCE	21
Monitoring of Compliance with REPS Requirement	21
Cost Recovery Rider	22
Electric Public Utilities	23
Electric Membership Corporations and Municipally-Owned	
Electric Utilities	27
ISSUES FOR CONSIDERATION	34

#### APPENDICES:

- Docket No. E-100, Sub 113, In the Matter of Rulemaking Proceeding to Implement Session Law 2007-397
  - Order Clarifying Electric Power Suppliers' Annual REPS Requirements (November 26, 2008)
  - Order on Duke Energy Carolinas, LLC, Motion for Clarification (May 7, 2009)
  - Order of Clarification (May 8, 2009)
  - Order on Public Staff's Motion for Clarification (June 17, 2009)
  - Order on Joint Motion to Determine Whether RECs are In-State or Out-of-State (July 13, 2009)
  - Order on Dominion's Second Motion for Reclarification (July 27, 2009)
  - Order on Dominion's Motion for Further Clarification (September 22, 2009)
  - Order Requesting Proposed Amendments to Rules R8-64
     Through R8-69 (September 4, 2009)
  - Letter from Chairman Edward S. Finley, Jr., North Carolina Utilities Commission, to Secretary Dee Freeman, North Carolina Department of Environment and Natural Resources (July 1, 2009)
  - Letter from Robin W. Smith, Assistant Secretary for Environment, North Carolina Department of Environment and Natural Resources, to Chairman Edward S. Finley, Jr., North Carolina Utilities Commission (August 14, 2009)
- Docket No. E-100, Sub 83, In the Matter of Investigation of Proposed Net Metering Rule
  - Order Amending Net Metering Policy (March 31, 2009)
- 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 raised one issue on its own and received five additional motions for clarification requesting interpretation of Senate Bill 3. In addition, the Commission has received one petition to modify or delay implementation of certain REPS requirements. As of September 30, 2009, all but the most-recently filed of these motions and petitions have been resolved.

First, on November 26, 2008, the Commission issued an Order Clarifying Electric Power Suppliers' Annual REPS Requirements, in which it concluded that 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.

On May 7 and 8, 2009, the Commission issued Orders in response to a Motion for Clarification filed by Duke Energy Carolinas, LLC (Duke), on November 3, 2008. In its Order, the Commission concluded that 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 peraccount cost cap established in G.S. 62-133.8(h), but that no set-aside requirement has priority over another. The Commission further determined that the set-aside requirements may be met through the generation of power, purchase of power, or purchase of unbundled renewable energy certificates (RECs); however, because the intent of the set-aside provisions is to address

renewable energy resources and issues indigenous to North Carolina and to foster development specifically of local renewable energy facilities, the energy associated with the RECs acquired to satisfy the set-aside requirements must be generated by or delivered to an electric power supplier. The Commission's decision with regard to the use of out-of-state RECs was subsequently reconsidered in response to a Motion by Dominion North Carolina Power (Dominion). The Commission further determined that the electric power suppliers are charged with collectively meeting the aggregate swine and poultry waste setaside requirements and that they may agree among themselves how to collectively satisfy those requirements. Lastly, the Commission concluded 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 should not be considered to be "in-State" RECs pursuant to G.S. 62-133.8(b)(2)(d) because the electric public utility is not purchasing electric power from the renewable energy facility. Rather, such RECs are eligible for REPS compliance pursuant to subdivision (b)(2)(e), which provides for the purchase of unbundled RECs, including a limit on the number of out-of-state RECs that may be used annually for REPS compliance.

On June 17, 2009, the Commission issued an Order addressing issues raised in a February 18, 2009 Motion for Clarification filed by the Public Staff. In its Order, the Commission concluded that an electric public utility cannot use existing (placed into service prior to January 1, 2007) utility-owned hydroelectric generation for REPS compliance, regardless of the size of a unit or the facility of which it is a part, but may use power generated from new (placed into service on or after January 1, 2007) small (10 MW or less) increments of utility-owned hydroelectric generating capacity. In addition, the Commission concluded that 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.

On July 13, 2009, the Commission issued a further Order related to out-of-state RECs addressing the issues raised by Progress Energy Carolinas, Inc. (PEC), and Peregrine Biomass Development Company, LLC (Peregrine), in response to the Commission's May 7 and 8, 2009 Orders on Duke's Motion for Clarification. In its July 13, 2009 Order, the Commission concluded that RECs associated with the electric power generated by Peregrine at its biomass-fueled combined heat and power facility located in South Carolina and purchased by PEC would be considered as in-State pursuant to G.S. 62-133.8(b)(2)(d). RECs associated with the useful thermal energy produced by the facility, however, would be considered as out-of-state pursuant to G.S. 62-133.8(b)(2)(e) and subject to that provision's 25% limitation on out-of-state RECs.

On July 27, 2009, the Commission issued an Order addressing the issues raised in a July 9, 2009 Second Motion for Reclarification filed by Dominion in response to the Commission's June 17, 2009 Order on the Public Staff's Motion for Clarification. In its July 27, 2009 Order, the Commission clarified that a utility-owned renewable energy facility placed into service prior to January 1, 2007, does not meet the definition of "new" renewable energy facility. In addition, unless the facility had a contract with NC GreenPower prior to January 1, 2007, a nonutility-owned renewable energy facility must have been placed into service on or after January 1, 2007, to be considered a "new" renewable energy facility and eligible to sell electric power or RECs to an electric public utility for REPS compliance.

On August 31, 2009, the Commission issued an Order allowing parties to file comments on a Joint Motion filed by PEC, Duke, Dominion, North Carolina Electric Membership Corporation (NCEMC), North Carolina Eastern Municipal Power Agency (NCEMPA), and North Carolina Municipal Power Agency Number 1 (NCMPA1) requesting that the Commission modify the swine and poultry waste resource requirements of G.S. 62-133.8(e) and (f) and clarify the electric power suppliers' obligations thereunder. Comments were filed in September, and the Commission's decision is pending.

On September 4, 2009, the Commission issued an Order 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. Written comments are due to be filed on or before November 13, 2009.

Lastly, on September 22, 2009, the Commission issued an Order reconsidering its May 7 and 8, 2009 Orders on Duke's Motion for Clarification in response to a Motion for Further Clarification filed by Dominion on June 12, 2009. In its September 22, 2009 Order, the Commission concluded that the 25% limitation on the use of out-of-state RECs applies to the general REPS obligation and <u>each</u> of the individual set-aside provisions and that Dominion is expressly exempted from the 25% limitation.

# 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. Since October 1, 2008, the Commission has received more than 140 CPCN applications or reports of

proposed construction. As of September 30, 2009, the Commission has accepted registration statements filed by seventy-two (72) facilities.

### Net metering

On March 31, 2009, the Commission issued an Order amending its policy on net metering, whereby a customer that owns and operates an electric generating facility is billed according to the difference over a billing period between the amount of energy the customer consumes and the amount of energy it generates. In its Order, the Commission concluded that Duke, Dominion and PEC should file revised riders or tariffs that allow net metering for any customer that owns and operates a renewable energy facility that generates electricity with a capacity of up to 1 MW. The customer may elect to take retail electric service pursuant to any rate schedule available to other customers in the same rate class and may not be assessed any standby, capacity, metering or other fees other than those approved for all customers on the same rate schedule. If the customer chooses to take retail electric service pursuant to a TOU-demand rate schedule, it shall retain ownership of all RECs associated with its electric generation. If the customer chooses to take retail electric service pursuant to any other rate schedule, RECs associated with all electric generation by the facility shall be assigned to the utility as part of the net metering arrangement.

### REC tracking

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 and to select an administrator. The Commission has established a stakeholder process to finalize a Requirements Document for the tracking system.

On August 26, 2009, Governor Perdue signed into law Session Law 2009-475 enacting G.S. 62-133.8(k) and requiring the Commission, no later than July 1, 2010, to develop, implement and maintain an online REC tracking system to verify the compliance of electric power suppliers with the REPS requirement. The Commission intends to issue a Request for Proposals (RFP) shortly and select an administrator before the end of this year.

### 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.

## **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, beginning in 2009, 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 2009 REPS compliance plan, PEC indicated that its overall approach to REPS compliance, for itself and several of its wholesale customers, is to meet the utility-specific solar set-aside requirement, meet its share of the poultry and swine waste statewide set-aside requirement, reduce load through effective energy efficiency measures, and meet the remainder of the REPS requirement with the most cost-effective, reliable renewable resources available. PEC stated

that it does not currently own or operate new renewable energy facilities, but is evaluating the use of alternative fuels at its existing generation facilities.

PEC has adopted a competitive bidding process for the purchase of energy or RECs from renewable energy facilities through which market participants have an opportunity to propose projects on a continuous basis. PEC forecasts that it will meet its solar set-aside requirement in 2010. PEC also intends to comply with a portion of the REPS requirement by implementing energy efficiency measures. In the past year, 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 6, 2008, PEC filed an application in Docket No E-2, Sub 930 for approval of an REPS rider effective December 1, 2008. On November 14, 2008, the Commission issued an Order approving an REPS charge of \$0.36 per month for residential customers, \$1.82 per month for commercial customers, and \$18.24 per month for industrial customers.

On May 18, 2009, PEC filed its 2008 REPS compliance report in Docket No. E-2, Sub 948. On June 4, 2009, PEC filed an application in that docket seeking to increase its REPS rider to \$0.62 per month for residential customers, \$3.11 per month for commercial customers, and \$31.02 per month for industrial customers. A hearing was held on PEC's compliance report and REPS cost recovery rider on September 16, 2009, and a final decision is pending before the Commission.

### Duke Energy Carolinas, LLC

In its 2009 REPS compliance plan, Duke characterized its renewable energy strategy as one of diversification. Specifically, stated Duke, it seeks to build its portfolio of renewable resources through a combination of (1) resources owned/operated by Duke, (2) power purchase agreements, and (3) purchases of unbundled RECs. In addition, Duke intends to comply with a portion of the REPS requirement by implementing cost-effective energy efficiency measures. Duke has also agreed to provide REPS compliance services for several of its wholesale customers.

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, and expects the program to be fully implemented by the end of 2010. Duke is also exploring opportunities to co-fire biomass at existing coal-fired generating stations, to repower coal-fired stations as dedicated biomass-fired power stations, and to add new hydro generation capacity that would qualify for REPS compliance. Duke has entered into multiple agreements pertaining to solar and general renewable resources, but continues to express

challenges in meeting the swine and poultry waste set-aside requirements. Duke stated that it is confident that it will meet its 2010 REPS obligation under the solar set-aside requirement.

On February 26, 2009, Duke received approval from the Commission for its portfolio of energy efficiency programs. Duke has begun implementation of these programs and will bank energy efficiency savings for future REPS compliance. Duke projects that it will achieve more energy efficiency than what can be utilized for REPS compliance pursuant to G.S. 62-133.8(b)(2)(c) for the foreseeable future.

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, equal to \$0.13 per month for residential customers, \$0.66 per month for commercial customers, and \$6.60 per month for industrial customers. 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. The establishment of a final REPS rider is still pending before the Commission.

### Dominion North Carolina Power

In its 2009 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 does not intend to seek an REPS rider until 2010 when its rate moratorium established in Docket No. E-22, Sub 412 expires. Dominion has agreed to provide REPS compliance services for the Town of Windsor.

Dominion currently plans to use unbundled solar RECs to meet its 2010 and 2011 solar set-aside requirements. 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). Lastly, Dominion stated that it intends to request approval by the Commission of seven energy efficiency programs in the near future. Dominion projects energy efficiency savings of 5,090 MWh in 2011 from these programs.

### EMCs and municipally-owned electric utilities

There are thirty-one (31) EMCs serving more than 968,000 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 over 568,000 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) and the fifty-one (51) municipal members of the power agencies to file through NCEMPA and NCMPA1.

The Commission received 2009 REPS compliance plans and 2008 REPS compliance reports filed by GreenCo, on behalf of its members; Halifax Electric Membership Corporation (Halifax); and the three electric cooperatives that purchase wholesale power from TVA. The Commission also received a 2009 REPS compliance plan filed by EnergyUnited Electric Membership Corporation (EnergyUnited). The Commission contacted two additional cooperatives that serve retail customers in North Carolina, but that are headquartered out-of-state, and they have committed to comply with the REPS requirements of Senate Bill 3 and the Commission's rules.

In addition, the Commission received 2009 REPS compliance plans and 2008 REPS compliance reports filed by NCEMPA and NCMPA1, on behalf of their members; Fayetteville Public Works Commission (PWC); the Town of Winterville; and Murphy Power Board. The Commission also received letters from a number of municipalities stating that they intend to rely on their wholesale electric suppliers for REPS compliance. The Commission contacted two additional towns that neglected to file, and they have committed to comply with the REPS requirements of Senate Bill 3 and the Commission's rules.

In its 2009 REPS compliance 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 to meet its members' REPS obligations. GreenCo estimates energy reductions of 29,865 MWh in 2008 from its members' energy efficiency programs and indicated that it has executed contracts for one solar facility located near Rocky Mount, North Carolina, and for one wind facility located in lowa.

In its plan, EnergyUnited stated that it has executed contracts with solar and landfill gas projects, has made a one-time purchase of RECs from an out-of-state wind facility, and has submitted two energy efficiency programs to the Commission for approval. EnergyUnited indicated that it anticipates obtaining solar resources sufficient to meet its REPS solar set-aside requirement in 2010.

In its plan, Halifax stated that it plans to meet its overall requirements through its SEPA entitlements, energy efficiency savings, and other project investment or purchase of RECs. Halifax stated that it is evaluating options, but has not committed on any initiative to provide RECs needed for compliance with

its 2010 solar set-aside requirement. Halifax is evaluating a number of energy efficiency programs, and has implemented programs for the promotion and distribution of compact fluorescent light bulbs, residential energy audits, and high efficiency heat pump rebates. Halifax estimated energy reductions of 229 MWh in 2008 from these three energy efficiency programs.

In their plans, NCEMPA and NCMPA1 stated that their members are committed to promoting the development of renewable energy and energy efficiency in North Carolina through working to meet their REPS compliance requirements in G.S. 62-133.8(c), (d), (e), and (f). NCEMPA stated that its members will meet approximately 30% of their REPS requirements pursuant to G.S. 62-133.8(c)(2)(e) through purchases of supplemental energy from PEC and that it has identified a number of demand-side management and energy efficiency programs that its members may implement to produce energy savings for REPS compliance. In its compliance report, NCEMPA estimated energy reductions from its members' demand-side management and energy efficiency programs of 11,947 MWh in 2008. Although it purchased no renewable energy or RECs, NCEMPA stated that its REPS incremental costs exactly equaled its peraccount cost cap.

In its plan, NCMPA1 stated that, in addition to the implementation of demand-side management and energy efficiency programs by its members, it intends to investigate and develop new renewable energy facilities, issue an RFP for renewable resources, and negotiate and execute agreements for costeffective 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, NCMPA1 intends to execute contracts for the development of a solar photovoltaic (PV) facility; evaluate potential solar applications, including solar thermal; consider incentives for customers to convert to or install solar thermal water heating; and investigate various other regional supply-side options. NCMPA1 is investigating proposals for swine waste facilities and has entered into an agreement to purchase a combination of biomass and poultry litter RECs. In its compliance report, NCMPA1 estimated energy reductions from its members demand-side management and energy efficiency programs of 523 MWh in 2008. NCMPA1 stated that its incremental costs of REPS compliance for 2008 totaled less than 10% of its per-account cost cap.

In its plan, the Town of Winterville stated that it has considered and evaluated several renewable energy and energy efficiency programs and has begun implementation. It has begun a program to encourage the installation of solar PV and solar thermal at customer sites and is working to identify one or more municipal sites where a pilot solar facility can be installed. Winterville projects energy savings of approximately 148 MWh in 2009 increasing to more than 1100 MWh in 2011 from its portfolio of energy efficiency programs. It expects to have sufficient solar facilities installed by 2010 to meet its REPS set-aside requirement.

In its plan, PWC stated that, as permitted by G.S. 62-133.8(c)(2)(e), it will meet its REPS obligation through its purchases of wholesale power under a power purchase agreement with PEC.

Although not required to comply with the REPS requirement, New River Light & Power Company filed a letter with the Commission stating that it continues to be committed to the development of renewable energy and energy efficiency and updating the Commission as to its activities in this area.

### Issues for Consideration

With the first REPS compliance plans and reports now being filed by electric power suppliers, numerous issues have arisen that have required the Commission to discern the General Assembly's intent and to interpret Senate Bill 3. Several issues were highlighted in last year's Commission report and have, in the interim, been addressed by the Commission. The most significant issue at this time continues to relate to the swine and poultry waste set-aside requirements. In the Commission's May 7 and 8, 2009 Orders on Duke's November 3, 2008 Motion for Clarification, it attempted to address concerns raised with regard to these set-aside requirements. The electric power suppliers, however, continue to express concerns about their ability to comply with these requirements and have filed a Joint Motion requesting that the Commission modify the swine and poultry waste resource requirements and clarify the electric power suppliers' obligations thereunder. This issue remains pending before the Commission

# 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). 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>&</sup>lt;sup>1</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).

# **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. The Commission invited interested persons to intervene and file proposed rules, rule revisions, or other comments. Comments were received from twenty-four (24) persons, entities, or organizations.

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, beginning in 2008, an annual REPS compliance plan and, beginning in 2009, an annual REPS compliance report to demonstrate reasonable plans for and actual compliance with the REPS requirement.

Since issuing its February 29, 2008 Order, the Commission has raised one issue on its own and received five additional motions for clarification requesting interpretation of Senate Bill 3. In addition, the Commission has received one petition to modify or delay implementation of certain REPS requirements. As discussed below, as of September 30, 2009, all but the most-recently filed of these motions and petitions have been resolved.

On September 4, 2009, the Commission issued an Order 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. Written comments are due to be filed on or before November 13, 2009.

# Order Requesting Comments (September 4, 2008)

On September 4, 2008, the Commission issued an Order requesting comments on the proper interpretation of the REPS compliance requirements for years not unambiguously set out in G.S. 62-133.8(b), (c), (d), and (e). On November 26, 2008, the Commission issued an Order Clarifying Electric Power Suppliers' Annual REPS Requirements. Noting that the law is ambiguous, the Commission concluded that 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. Further, the Commission found no support for the electric power suppliers' proposal to base their REPS obligations on weather-normalized sales data.

# Duke Energy Carolinas, LLC, Motion for Clarification (November 3, 2008)

On November 3, 2008, Duke Energy Carolinas, LLC (Duke), filed a Motion for Clarification with regard to numerous issues concerning the interpretation of Senate Bill 3 to assist in its REPs compliance planning. On November 13, 2008, the Commission issued an Order inviting parties to provide written comments and reply comments on the issues raised by Duke, including (1) priority of, use of renewable energy certificates (RECs) for, responsibility for, and collaborative efforts to comply with aggregate set-aside requirements; and (2) behind-themeter customer generation and renewable thermal energy located in out-of-state service area.

On May 7 and 8, 2009, the Commission issued Orders on Duke's Motion. With regard to the solar, swine waste, and poultry waste set-aside requirements, the Commission concluded that their presence 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). The Commission further concluded, however, that no set-aside requirement has priority over another. If it cannot satisfy all of the set-aside requirements without exceeding the cost cap, an electric power supplier may exercise its reasonable judgment in determining which renewable energy or RECs to acquire with the funds available under the cost cap. The Commission further determined that the set-aside requirements may be met through the generation of power, purchase of power, or purchase of unbundled RECs; however, because the intent of the set-aside provisions is to address renewable energy resources and issues indigenous to North Carolina and to foster development specifically of local renewable energy facilities, the energy associated with the RECs acquired to satisfy the set-aside requirements must be generated by or delivered to an electric power supplier. The Commission's decision with regard to the use of out-of-state RECs was subsequently reconsidered, as detailed below, in response to a Motion by Dominion North Carolina Power (Dominion).

In addition, the Commission determined that, 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. As the Commission stated in its 2008 REPS Report, it "expects the electric power suppliers to work together to collectively meet the aggregate obligation and comply with G.S. 62-133.8(e) and (f)." The Commission, therefore, concluded 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. To alleviate any concerns whether such collaborative efforts would be lawful under the "state action" antitrust immunity doctrine, the

Commission required 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.

With regard to RECs associated with out-of-state renewable generation not delivered to and purchased by an electric public utility in North Carolina, the Commission concluded that such RECs should not be considered to be "in-State" RECs pursuant to G.S. 62-133.8(b)(2)(d) because the electric public utility is not purchasing electric power from the renewable energy facility. Rather, such RECs are eligible for REPS compliance pursuant to subdivision (b)(2)(e), which provides for the purchase of unbundled RECs, including a limit on the number of out-of-state RECs that may be used annually for REPS compliance. Similarly, RECs associated with out-of-state thermal energy should not be considered as "in-State" RECs, but should be considered as unbundled out-of-state RECs subject to the 25% limitation in G.S. 62-133.8(b)(2)(e) because no electric power is being purchased from such a facility.

### Public Staff Motion for Clarification (February 18, 2009)

On February 18, 2009, the Public Staff – North Carolina Utilities Commission filed a Motion seeking clarification of a number of issues that it stated either have arisen, or appear likely to arise, in connection with the REPS compliance plans that had been filed by the electric power suppliers. A number of these issues were previously raised in the Commission's 2008 REPS Report. On February 26, 2009, the Commission issued an Order inviting parties to provide written comments and reply comments on the issues raised by the Public Staff, including (1) whether electric generation at existing utility-owned hydroelectric power facilities may be used for REPS compliance; and (2) whether university-owned electric suppliers, retail electric suppliers that are wholesale customers of the Tennessee Valley Authority (TVA), and retail electric suppliers that are headquartered outside of North Carolina are subject to the REPS requirement.

On June 17, 2009, the Commission issued an Order on the Public Staff's Motion. With regard to hydroelectric power facilities, the Commission concluded that an electric public utility cannot use existing (placed into service prior to January 1, 2007) utility-owned hydroelectric generation for REPS compliance, regardless of the size of a unit or the facility of which it is a part, but may use power generated from new (placed into service on or after January 1, 2007) small (10 MW or less) increments of utility-owned hydroelectric generating capacity.

With regard to the entities subject to the REPS requirement of Senate Bill 3, the Commission concluded that G.S. 62-133.8, through its broadly encompassing definition of electric power supplier, is intended to apply to all entities that sell electric power to retail customers in North Carolina. The

Commission further determined that TVA's 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 because they are neither public utilities, EMCs, nor municipalities. The Commission, therefore, stated that it would require each TVA distributor and each electric cooperative that provides retail electric service to customers in North Carolina to comply with Senate Bill 3 and the Commission's rules or be subject to a show cause proceeding.

## Progress Energy Carolinas, Inc., and Peregrine Biomass Development Company, LLC, Joint Motion (May 13, 2009)

In response to the Commission's May 7 and 8, 2009 Orders on Duke's Motion for Clarification, on May 13, 2009, Progress Energy Carolinas, Inc. (PEC), and Peregrine Biomass Development Company, LLC (Peregrine), filed a Joint Motion requesting that the Commission declare that all RECs earned by Peregrine's biomass-fueled combined heat and power facility located in PEC's South Carolina service territory, including RECs associated with both the electric power and useful thermal energy produced by the facility, be considered in-State for REPS compliance and not be subject to the 25% out-of-state REC limit contained in G.S. 62-133.8(b)(2)(e). By Order dated May 22, 2009, the Commission requested that parties comment on the issue raised in the Joint Motion.

On July 13, 2009, the Commission issued an Order on the Joint Motion concluding that G.S. 62-133.8(b)(2)(d) applies to the electric power generated by Peregrine and purchased by PEC and, implicitly, the RECs directly associated with that electric power; however, G.S. 62-133.8(b)(2)(e) applies to the RECs directly associated with the useful thermal energy produced by the facility. While the thermal RECs earned and sold by Peregrine are eligible to count toward PEC's REPS compliance pursuant to G.S. 62-133.8(b)(2)(e), they are also subject to that provision's 25% limitation on out-of-state RECs.

# Dominion North Carolina Power Motion for Further Clarification (June 12, 2009)

In response to the Commission's Orders on Duke's Motion for Clarification, on June 12, 2009, Dominion filed a Motion for Further Clarification in response to the Commission's determinations on questions related to the use of RECs to meet the REPS set-aside requirements. Specifically, Dominion requested that the Commission clarify that Dominion may purchase out-of-state RECs to satisfy 100% of both the set-aside requirements and the overall REPS requirements. On July 1, 2009, the Commission issued an Order allowing parties

an opportunity to file written comments on the issue raised by Dominion and on whether the 25% limitation on out-of-state RECs in G.S. 62-133.8(b)(2)(e) and (c)(2)(d) should apply to both the general REPS obligation and to the specific set-aside provisions in G.S. 62-133.8(d), (e) and (f).

On September 22, 2009, the Commission issued an Order on Dominion's Motion reconsidering its prior decision and concluding that, to best reconcile the language of the statute with the legislature's intent to foster local economic development and the use of indigenous renewable energy resources, the 25% limitation on the use of out-of-state RECs applies to the general REPS obligation and <u>each</u> of the individual set-aside provisions. The Commission concluded that the language of the set-aside provisions simply establishes the amount of each set-aside requirement that must be obtained from the specified renewable energy resource, but does not impose an additional requirement that all of the power (or equivalent amount of energy) be supplied by facilities located within North Carolina. The statute, however, expressly exempts Dominion from the 25% limitation on the use of unbundled out-of-state RECs. Lastly, the Commission reiterated that the set-aside requirements cannot be met through energy reductions due to the implementation of energy efficiency or, in the case of EMCs or municipalities, demand-side management measures.

# Dominion North Carolina Power Second Motion for Reclarification (July 9, 2009)

In response to the Commission's June 17, 2009 Order on the Public Staff's Motion for Clarification, on July 9, 2009, Dominion filed a Second Motion for Reclarification regarding whether, pursuant to G.S. 62-133.8(b)(2)(b), it may use electric power produced at existing utility-owned renewable generation facilities or purchase power produced at existing nonutility-owned renewable generation facilities to satisfy its REPS requirements.

On July 27, 2009, the Commission issued an Order addressing the issues raised in Dominion's Motion. Having previously addressed the issue of utility-owned hydroelectric power facilities, the Commission clarified that the same reasoning is applicable to the use of any renewable energy resource at an existing utility-owned generating facility. For a non-hydroelectric power facility, a "new" renewable energy facility must be one that was placed into service on or after January 1, 2007, or that had a contract with NC GreenPower prior to January 1, 2007. Since the NC GreenPower exception does not apply to utility-owned generation, a utility-owned renewable energy facility placed into service prior to January 1, 2007, does not meet the definition of "new" renewable energy facility. As the Commission previously determined with respect to hydropower, it would not read G.S. 62-133.8(b)(2)(b) to negate the remaining provisions of subdivision (b)(2) and allow that which the legislature clearly otherwise excluded. Stating that G.S. 62-133.8(b)(2) is inapplicable to purchases of power or RECs, the Commission further concluded that, unless the facility had a contract with

NC GreenPower prior to January 1, 2007, a nonutility-owned renewable energy facility must have been placed into service on or after January 1, 2007, to be considered a "new" renewable energy facility and eligible to self electric power or .RECs to an electric public utility for REPS compliance.

### Electric Power Suppliers Joint Motion (August 14, 2009)

On August 14, 2009, PEC, Duke, Dominion, North Carolina Electric Membership Corporation (NCEMC), North Carolina Eastern Municipal Power Agency (NCEMPA), and North Carolina Municipal Power Agency Number 1 (NCMPA1) filed a Joint Motion requesting that the Commission modify the swine and poultry waste resource requirements of G.S. 62-133.8(e) and (f) and clarify the electric power suppliers' obligations thereunder. By Order dated August 31, 2009, the Commission requested that the Public Staff and other interested parties comment on the issues raised in the Joint Motion. Comments were filed in September, and the Commission's decision is pending.

### 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.

# Certification and report of proposed construction

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 up to 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. Since October 1, 2008, the Commission has received more than 140 CPCN applications or reports of proposed construction.

# Registration

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, 2009, the Commission has accepted registration statements filed by seventy-two (72) facilities, a list of which is provided in Appendix 3.

### **Net Metering**

"Net metering" refers to a billing arrangement whereby a customer that owns and operates an electric generating facility is billed according to the difference over a billing period between the amount of energy the customer consumes and the amount of energy it generates. In Senate Bill 3, codified at G.S. 62.133.8(i)(6), the General Assembly required the Commission to consider whether it is in the public interest to adopt rules for electric public utilities for net metering of renewable energy facilities with a generation capacity of one megawatt or less. In its previous Orders, the Commission had required utilities to offer net metering to a customer that owns and operates a solar photovoltaic (PV), wind-powered, micro-hydro, or biomass-fueled electric generating facility with a capacity of up to 20 kW for a residential customer-generator and 100 kW for a non-residential customer-generator. The Commission's Orders specified that net metering customers must be on a time-of-use (TOU) demand rate schedule and that the kilowatt-hour credit, if any, shall be reset to zero at the beginning of each summer billing season. Any RECs associated with this excess generation shall also be granted to the utility when the excess generation credit balance is zeroed out.

On June 9, 2008, the Commission issued an Order establishing a procedural schedule to reconsider all aspects of its existing net metering policy, including whether solar PV, wind-powered, micro-hydro, or biomass-fueled electric generating facilities up to one megawatt or some smaller size should be allowed to net meter; whether to allow additional types of generating facilities to net meter; and whether to otherwise change the terms and conditions under which generating facilities currently are allowed to net meter.

After receiving testimony from public witnesses in Raleigh and Charlotte and from expert witnesses for the parties, the Commission issued an Order on March 31, 2009, amending its net metering policy. In its Order, the Commission concluded that Duke, Dominion and PEC should file revised riders or tariffs that allow net metering for any customer that owns and operates a renewable energy facility that generates electricity with a capacity of up to 1 MW. The customer shall be required to interconnect pursuant to the approved generator interconnection standard, which includes provisions regarding the study and implementation of any improvements to the utility's electric system required to accommodate the customer's generation, and to operate in parallel with the utility's electric distribution system. The customer may elect to take retail electric service pursuant to any rate schedule available to other customers in the same rate class and may not be assessed any standby, capacity, metering or other

fees other than those approved for all customers on the same rate schedule. Standby charges shall be waived, however, for any net-metered residential customer with electric generating capacity up to 20 kW and any net-metered nonresidential customer up to 100 kW. Credit for excess electricity generated during a monthly billing period shall be carried forward to the following monthly billing period, but shall be granted to the utility at no charge and the credit balance reset to zero at the beginning of each summer billing season. If the customer elects to take retail electric service pursuant to any TOU rate schedule, excess on-peak generation shall first be applied to offset on-peak consumption and excess offpeak generation to offset off-peak consumption; any remaining on-peak generation shall then be applied against any remaining off-peak consumption. If the customer chooses to take retail electric service pursuant to a TOU-demand rate schedule, it shall retain ownership of all RECs associated with its electric generation. If the customer chooses to take retail electric service pursuant to any other rate schedule, RECs associated with all electric generation by the facility shall be assigned to the utility as part of the net metering arrangement.

### **REC Tracking**

In its February 29, 2008 Order, 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."

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 and to select an administrator. The Commission established a stakeholder process to finalize a Requirements Document for the tracking system. Numerous meetings of this stakeholder group have been held during the past year.

On August 26, 2009, Governor Perdue signed into law Session Law 2009-475 enacting G.S. 62-133.8(k) and requiring the Commission, no later than July 1, 2010, to develop, implement, and maintain an online REC tracking system in order to verify the compliance of electric power suppliers with the REPS requirements.<sup>2</sup> The Commission intends to issue a Request for Proposals (RFP) shortly and select an administrator before the end of this year.

<sup>&</sup>lt;sup>2</sup> Session Law 2009-475 further directs the Commission and the Energy Policy Council to jointly study and design an online REC trading exchange to facilitate the establishment of a market for purchase and sale of RECs and to report their findings and recommendations to the General Assembly by April 1, 2010.

# **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.

# 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, beginning in 2009, 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). The fuel charge adjustment proceedings are held at different times of the year for each electric public utility, and each utility must file its REPS compliance report at least 30 days before it files the information required for its fuel charge adjustment proceeding.

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. Pursuant to Rule R8-67(c)(3), the Commission will issue an order scheduling a hearing to consider the REPS compliance report filed by each EMC or municipally-owned electric utility, requiring public notice, and establishing deadlines for intervention and the filing of additional direct and rebuttal testimony and exhibits.

# 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:

Customer Class	2008-2011	2012-2014	2015 and thereafter
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>	REPS Requirement
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 1, 2009, PEC filed its 2009 REPS compliance plan in Docket No. E-100, Sub 124 as part of its 2009 Integrated Resource Plan (IRP) annual update. In its plan, PEC indicated that its overall approach to REPS compliance is to meet the utility-specific solar set-aside requirement, meet its share of the poultry and swine waste statewide set-aside requirement, reduce load through effective energy efficiency measures, and meet the remainder of the REPS requirement with the most cost-effective, 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 twenty-five (25) contracts for solar, hydro, biomass, landfill gas, and wind RECs. PEC has also purchased cost-effective out-of-state wind RECs for REPS compliance. PEC stated that it does not currently own or operate new renewable energy facilities, but is evaluating the use of alternative fuels at its existing generation facilities.

PEC also intends to comply with a portion of the REPS requirement by implementing energy efficiency measures. In the past year, 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 6, 2008, PEC filed an application in Docket No E-2, Sub 930 for approval of an REPS rider effective December 1, 2008. On November 14, 2008, the Commission issued an Order approving an REPS charge of \$0.36 per month for residential customers, \$1.82 per month for commercial customers, and \$18.24 per month for industrial customers.

On May 18, 2009, PEC filed its 2008 REPS compliance report in Docket No. E-2, Sub 948. On June 4, 2009, PEC filed an application in that docket seeking to increase its REPS rider to \$0.62 per month for residential customers, \$3.11 per month for commercial customers, and \$31.02 per month for industrial customers. In its REPS compliance report, PEC indicated that it had purchased 2,509 solar RECs between April 1, 2008, and July 31, 2009, and that it expects to purchase an additional 21,078 solar RECs between December 1, 2009, and November 30, 2010. PEC forecasts its REPS obligation in 2010 under the solar set-aside requirement, including the wholesale customers for which it is providing REPS compliance service, to total 7,623 MWh, less than the number of solar RECs it expects to acquire by that time. PEC further indicated that it had purchased 186,517 RECs from landfill methane, biomass, hydro, or wind facilities between April 1, 2008, and July 31, 2009, and that it expects to purchase an additional 1.042,403 RECs from such facilities between December 1, 2009, and November 30, 2010. A hearing was held on PEC's compliance report and REPS cost recovery rider on September 16, 2009, and a final decision is pending before the Commission.

# **Duke Energy Carolinas**

On November 3, 2008, Duke filed its 2008 IRP biennial report and REPS compliance plan in Docket No. E-100, Sub 118. On September 1, 2009, Duke filed its 2009 REPS compliance plan in Docket No. E-100, Sub 124 as part of its 2009 IRP annual update. In its plan, Duke characterized its renewable energy strategy as one of diversification. Specifically, stated Duke, it seeks to build its portfolio of renewable resources through a combination of (1) resources owned/operated by Duke, (2) power purchase agreements, and (3) purchases of unbundled RECs. In

addition, Duke intends to comply with a portion of the REPS requirement by implementing cost-effective energy efficiency measures. 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; the cities of Concord, Highlands, and Kings Mountain; and the towns of Dallas and Forest City.

With respect to utility-owned 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 expects construction of an initial phase of projects to begin prior to year-end 2009 and for the program to be fully implemented by the end of 2010. Duke is also exploring opportunities either to co-fire biomass at existing coal-fired generating stations or to repower coal-fired stations as dedicated biomass-fire power stations. Lastly, Duke is evaluating opportunities to add new hydro generation capacity that would qualify for REPS compliance under Senate Bill 3.

With regard to power purchase agreements and REC purchases, Duke has entered into multiple agreements pertaining to solar and general renewable resources, but has yet to enter into any agreements for swine or poultry waste resources. Duke noted that is has joined with other electric power suppliers to express the challenges in meeting the swine and poultry waste set-aside requirements, but "remains committed to procuring or developing these renewable resources, provided they are available and it is in the public interest to do so." Lastly, Duke stated that it is in active dialogue with other electric power suppliers to collaboratively procure these resources as directed by the Commission.

With respect to solar and general renewable resources, Duke has entered into several power purchase agreements and unbundled REC purchases, including agreements for landfill gas, hydro, wind, solar PV, and solar thermal resources. Some of these REC purchase agreements have been executed under Duke's "standard offer," which it established in 2009 with the intent to streamline the process for smaller producers. 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 11,142 MWh, and stated that it is confident that it will meet this requirement.

On February 26, 2009, Duke received approval from the Commission for its portfolio of energy efficiency programs. Duke has begun implementation of these programs and will bank energy efficiency savings for future REPS compliance. Duke projects that it will achieve more energy efficiency than what can be utilized for REPS compliance pursuant to G.S. 62-133.8(b)(2)(c) for the foreseeable future.

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, equal to \$0.13 per month for residential customers, \$0.66 per month for commercial customers, and \$6.60 per month for industrial customers. 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. The establishment of a final REPS rider is still pending before the Commission.

#### Dominion North Carolina Power

On September 1, 2009, Dominion filed its 2009 REPS compliance plan in Docket No. E-100, Sub 124 as part of its 2009 IRP annual update. On July 23, 2009, the Commission issued an Order in Docket No. E-22, Sub 455 granting Dominion an extension of time within which to file its 2008 REPS compliance report until after the Commission rules on Dominion's then-outstanding motions for clarification in Docket No. E-100, Sub 113. Dominion does not intend to seek an REPS rider until 2010 when its rate moratorium established in Docket No. E-22, Sub 412 expires. 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 (757 and 753 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). Pending the Commission's Order on its motions for clarification, Dominion had not executed any contracts for RECs as of September 1, 2009. Lastly, Dominion stated that it intends to request approval by the Commission of seven energy efficiency programs in the near future. Dominion projects energy efficiency savings of 5,090 MWh in 2011 from these programs.

# Electric Membership Corporations and Municipally-Owned Electric Utilities

There are thirty-one (31) EMCs serving more than 968,000 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 over 568,000 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) and the fifty-one (51) municipal members of the power agencies to file through NCEMPA and NCMPA1.

### 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:

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

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

- Generate electric power at a new renewable energy facility.
- Reduce energy consumption through the implementation of demand-side management or energy efficiency measures.
- Purchase electric power from a renewable energy facility or a hydroelectric power facility, provided that no more than thirty percent (30%) of the requirements of this section may be met with hydroelectric power, including allocations made by the Southeastern Power Administration.
- Purchase renewable energy certificates derived from in-State or out-of-state renewable energy facilities. An electric power supplier subject to the requirements of this subsection may use certificates derived from out-of-state renewable energy facilities to meet no more than twenty-five percent (25%) of the requirements of this section.
- 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, 2009, GreenCo filed its 2009 REPS compliance plan and 2008 REPS compliance report with the Commission on behalf of its member EMCs.<sup>3</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 savings to meet its members' REPS obligations. GreenCo stated that it continues to develop and pilot test energy efficiency programs and anticipates filing for Commission approval later this year. As part of one lighting program, for example, four of GreenCo's members distributed 124,000 compact fluorescent light bulbs to their residential consumers, and another 132,000 light bulbs are planned to be delivered by the end of 2009. GreenCo estimated energy reductions of 29,865 MWh in 2008 from all of its members' energy efficiency programs. GreenCo further stated that it will evaluate DSM programs, including smart grid applications, for their potential to provide energy savings. GreenCo indicated that it has currently executed contracts for one solar facility located near Rocky Mount, North Carolina, and for one wind facility located in Iowa. Lastly, for 2008, 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 September 1, 2009, EnergyUnited Electric Membership Corporation (EnergyUnited) filed its 2009 IRP and REPS compliance plan with the Commission. In its plan, EnergyUnited stated that it has executed contracts with solar and landfill gas projects, has made a one-time purchase of RECs from an out-of-state wind facility, and has submitted two energy efficiency programs to the Commission for approval (Docket No. EC-82, Sub 10). EnergyUnited further stated that in 2007 and 2008 it gave away compact fluorescent light bulbs to the members who attended its annual meeting and that it continues the process of educating its members on the value of energy efficiency and conservation. In its

<sup>&</sup>lt;sup>3</sup> The following EMCs are members of GreenCo: Albemarle EMC, Blue Ridge 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.

plan, EnergyUnited indicated that it anticipates obtaining solar resources sufficient to meet its REPS solar set-aside requirement in 2010.

On September 1, 2009, Halifax Electric Membership Corporation (Halifax) filed its 2009 REPS compliance plan and 2008 REPS compliance report with the Commission. Halifax serves the Town of Enfield and has included Enfield's REPS requirement in its plan. In its plan, Halifax stated that it plans to meet its overall requirements through its SEPA entitlements, energy efficiency savings, and other project investment or purchase of RECs. Halifax estimated its 2010 solar set-aside requirement as 38 MWh, and stated that it is evaluating options, but has not committed on any initiative to provide RECs needed for compliance. Halifax is evaluating a number of energy efficiency programs and has implemented programs for the promotion and distribution of compact fluorescent light bulbs, residential energy audits, and high efficiency heat pump rebates. Halifax estimated energy reductions of 229 MWh in 2008 from these three energy efficiency programs.

On September 1, 2009, Blue Ridge Mountain Electric Membership Corporation, Mountain Electric Coop, Inc., and Tri-State Electric Membership Corporation filed their 2009 REPS compliance plans and 2008 REPS compliance reports in response to the Commission's June 17, 2009 Order. Together with Murphy Power Board, these electric power suppliers are wholesale distributors of power purchased from TVA. In their plans, these TVA distributors noted that they have only recently begun efforts to identify and develop programs to comply with their REPS obligation and stated that more detailed information will be available in future reports. Each has committed to implement the programs necessary for meeting the 2010 solar set-aside requirement.

Subsequent to the issuance of the Commission's June 17, 2009 Order, the Commission also contacted Broad River Electric Cooperative, Inc., and Mecklenburg Electric Cooperative, Inc., two additional electric cooperatives headquartered outside of North Carolina that serve retail customers within North Carolina, and received assurances that they each intend to comply with the REPS requirements of Senate Bill 3 and the Commission's rules.

### Municipally-owned electric utilities

On August 31, 2009, NCEMPA and NCMPA1 filed 2009 REPS compliance plans and 2008 REPS compliance reports with the Commission on behalf of their members. In its plan, NCEMPA stated that its members are committed to promoting the development of renewable energy and energy efficiency in North Carolina through working to meet their REPS compliance requirements in G.S. 62-133.8(c), (d), (e), and (f). In meeting this REPS requirement, however, its members are prohibited from purchasing, generating or using renewable energy, including purchases from hydroelectric power facilities, at least until 2018, under NCEMPA's power supply contract with PEC. NCEMPA

further stated that its members will meet approximately 30% 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 is investigating 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 of approximately 1400 MWh, but that it intends to investigate the use of solar thermal facilities and associated RECs. In its compliance report, NCEMPA estimated energy reductions from its members' demand-side management and energy efficiency programs of 11,947 MWh in 2008. NCEMPA stated that its incremental costs of REPS compliance for 2008. included (1) costs associated with its members' demand-side management and energy efficiency programs, (2) lost retail revenues, and (3) research and development costs, less total avoided costs. Although it purchased no renewable energy or RECs. NCEMPA stated that its incremental costs exactly equaled its per-account cost cap.

NCMPA1, in its plan, similarly stated that its members are committed to promoting the development of renewable energy and energy efficiency in North Carolina through working to meet their REPS compliance requirements in G.S. 62-133.8(c), (d), (e), and (f). Unlike, NCEMPA, however, NCMPA1 stated that, in addition to the implementation of demand-side management and energy efficiency programs by its members, NCMPA1 intends to investigate and develop new renewable energy facilities; issue an RFP for renewable resources, including biomass, hydro, solar and wind; and negotiate and execute agreements for costeffective 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 of approximately 1040 MWh, NCMPA1 intends to complete currently existing negotiations and execute contracts for the development of a solar PV facility to be located within the service area of one of its members; evaluate potential solar applications, including solar thermal; consider incentives for customers to convert to or install solar thermal water heating; and investigate various other regional supply-side options. NCMPA1 is investigating proposals for swine waste facilities and has entered into an agreement to purchase a combination of biomass and poultry litter RECs. In its compliance report, NCMPA1 estimated energy reductions from its members' demand-side management and energy efficiency programs of 523 MWh in 2008. NCMPA1 stated that its incremental costs of REPS compliance for 2008 included (1) incremental labor costs, and (2) research and development costs, which, together, totaled less than 10% of its per-account cost cap.

On September 1, 2009, the Town of Winterville filed its 2009 REPS compliance plan and 2008 REPS compliance report with the Commission. In its plan, Winterville stated that it has considered and evaluated several renewable energy and energy efficiency programs and has begun implementation. Under its wholesale power contract with PEC, Winterville can add generating capacity, and it has begun a program to encourage the installation of solar PV and solar thermal at customer sites. In addition, the Town is working to identify one or more municipal sites where a pilot solar facility can be installed. Winterville projects energy savings of approximately 148 MWh in 2009 increasing to more than 1100 MWh in 2011 from its portfolio of energy efficiency programs. It expects to have sufficient solar facilities installed by 2010 to meet its REPS set-aside requirement of approximately 10 MWh.

On September 1, 2009, Fayetteville Public Works Commission (PWC) filed its 2009 REPS compliance plan and 2008 REPS compliance report with the Commission. In its plan, PWC stated that, as permitted by G.S. 62-133.8(c)(2)(e), it will meet its REPS obligation through its purchases of wholesale power under a power purchase agreement with PEC.

As noted above with regard to TVA's EMC distributors, on September 1, 2009, Murphy Power Board (Murphy) filed its 2009 REPS compliance plans and 2008 REPS compliance reports in response to the Commission's June 17, 2009 Order. In its plan, Murphy noted that it had only recently begun efforts to identify and develop programs to comply with its REPS obligation and stated that more detailed information will be available in future reports. Murphy also committed to implement the programs necessary for meeting the 2010 solar REC requirement.

As further noted above, the towns of Black Creek, Dallas, Enfield, Forest City, Highlands, Lucama, Sharpsburg, Stantonsburg and Waynesville, and the cities of Concord and Kings Mountain. Black Creek, Lucama, Stantonsburg, and Waynesville filed letters with the Commission stating that PEC, as their wholesale provider, had agreed to meet their REPS requirements. The towns of Dallas and Forest City, and the cities of Concord, Highlands and Kings Mountain filed similar letters stating that Duke had agreed to meet their REPS requirements. 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 stated that it has agreed to meet the REPS requirement for the Town of Enfield.

Subsequent to the issuance of the Commission's June 17, 2009 Order, the Commission also contacted the towns of Fountain and Oak City, two North Carolina municipalities that neglected to file 2008 REPS compliance plans. Each town provided assurances that they intend to comply with the REPS requirements of Senate Bill 3 and the Commission's rules. A letter was received from the Town of Oak City, dated September 8, 2009, indicating that it had

spoken to consultants and intends to file its 2009 REPS compliance plan and 2008 REPS compliance report on or before December 31, 2009.

Although not required to comply with the REPS requirement; as determined in the Commission's June 17, 2009 Order, on August 31, 2009, New River Light & Power Company (New River), a division of Appalachian State University (ASU), filed a letter with the Commission stating that it continues to be committed to the development of renewable energy and energy efficiency and updating the Commission as to its activities in this area. New River stated, for example, that the ASU Student Renewable Energy Initiative recently installed a wind turbine and that New River is working on interconnection agreements for its customers' renewable projects. New River purchased 500 compact fluorescent light bulbs for ASU's Earth Day celebration and plans other light bulb offers to its customers. Lastly, New River is investigating whether generation is feasible at its former hydroelectric power facility.

# ISSUES FOR CONSIDERATION

As discussed above, with the first REPS compliance plans and reports now being filed by electric power suppliers, numerous issues have arisen that have required the Commission to discern the General Assembly's intent and to interpret Senate Bill 3. Several issues were highlighted in the Commission's 2008 REPS Report and have, in the interim, been addressed by the Commission, including determination of the REPS compliance requirements for years not unambiguously set out in G.S. 62-133.8(b), (c), (d), and (e); clarification of the use of electric generation at the utilities' existing hydroelectric facilities to meet the REPS requirement; and identification of those entities subject to the REPS requirements.

The most significant issue at this time continues to relate to the swine and poultry waste set-aside requirements. As noted in the 2008 REPS Report, G.S. 62-133.8(e) and (f) impose an obligation to purchase energy derived from swine and poultry waste on "electric power suppliers, in the aggregate." The requirement to meet these set-asides is explicitly different from the solar set-aside, G.S. 62-133.8(d), which imposes an obligation on each electric power supplier individually. Rather, for swine and poultry waste, the electric power suppliers collectively must meet the stated percentage or megawatt-hour obligation. In its 2008 REPS compliance plan, PEC indicated that it is planning to meet the utility-specific solar set-aside requirement, but only its pro-rata share of the poultry and swine waste statewide set-aside requirement. The Commission stated, however, that it expected the electric power suppliers to work together to collectively meet the aggregate obligation and comply with G.S. 62-133.8(e) and (f).

In the Commission's May 7 and 8, 2009 Orders on Duke's November 3, 2008 Motion for Clarification, it repeated this expectation and concluded 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. To alleviate any concerns whether such collaborative efforts would be lawful under the "state action" antitrust immunity doctrine, the Commission required 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.

As further noted above, however, the electric power suppliers continue to express concerns about their ability to comply with the swine and poultry waste set-aside requirements and have filed a Joint Motion requesting that the Commission modify the swine and poultry waste resource requirements and clarify the electric power suppliers' obligations thereunder. This issue remains pending before the Commission.

# **APPENDICES**

- 1. Docket No. E-100, Sub 113, In the Matter of Rulemaking Proceeding to Implement Session Law 2007-397
  - Order Clarifying Electric Power Suppliers' Annual REPS Requirements (November 26, 2008)
  - Order on Duke Energy Carolinas, LLC, Motion for Clarification (May 7, 2009)
  - Order of Clarification (May 8, 2009)
  - Order on Public Staff's Motion for Clarification (June 17, 2009)
  - Order on Joint Motion to Determine Whether RECs are In-State or Out-of-State (July 13, 2009)
  - Order on Dominion's Second Motion for Reclarification (July 27, 2009)
  - Order on Dominion's Motion for Further Clarification (September 22, 2009)
  - Order Requesting Proposed Amendments to Rules R8-64 Through R8-69 (September 4, 2009)
  - Letter from Chairman Edward S. Finley, Jr., North Carolina
     Utilities Commission, to Secretary Dee Freeman, North Carolina
     Department of Environment and Natural Resources
     (July 1, 2009)
  - Letter from Robin W. Smith, Assistant Secretary for Environment, North Carolina Department of Environment and Natural Resources, to Chairman Edward S. Finley, Jr., North Carolina Utilities Commission (August 14, 2009)
- 2. Docket No. E-100, Sub 83, In the Matter of Investigation of Proposed Net Metering Rule
  - Order Amending Net Metering Policy (March 31, 2009)
- 3. Renewable Energy Facility Registrations

## STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. E-100, SUB 113

## BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

) ORDER CLARIFYING ELECTRIC
) POWER SUPPLIERS' ANNUAL
) REPS REQUIRMENTS

BY THE COMMISSION: On February 29, 2008, and March 13 2008, the Commission issued Orders in the above-captioned docket adopting rules to implement Session Law 2007-397 (Senate Bill 3) and the Renewable Energy and Energy Portfolio Standard (REPS) in North Carolina. On September 4, 2008, the Commission issued an Order in this docket seeking comments on the proper interpretation of the REPS compliance requirements for those years for which it is not clearly stated in the law: (1) 2013-14, 2016-17, 2019-20, 2022 and thereafter for electric public utilities; (2) 2013-14, 2016-17, 2019 and thereafter for electric membership corporations (EMCs) and municipalities; (3) 2010 and thereafter for solar resources; and (4) 2012 and thereafter for swine waste resources. More particularly, the Commission sought comments regarding what percentage requirement should apply in each year and to what base the percentage requirement should apply.

Dominion North Carolina Power (Dominion); Duke Energy Carolinas, LLC (Duke); ElectriCities of North Carolina, Inc. (ElectriCities); Green Co Solutions, Inc. (GreenCo); and North Carolina Electric Membership Corporation (NCEMC) filed joint comments. In addition, comments were filed by Fibrowatt, LLC (Fibrowatt); North Carolina Sustainable Energy Association (NCSEA); Progress Energy Carolinas, Inc. (Progress); and the Public Staff.

#### Overall REPS Obligation

The September 4, 2008 Order asked, by way of example, "Under G.S. 62-133.8(b), what percentage and which year's North Carolina retail sales should be used to determine compliance with the REPS requirement for an electric public utility in 2013?" That provision states:

(b) Renewable Energy and Energy Efficiency Standards (REPS) for Electric Public Utilities. – (1) Each electric public utility in the State shall be subject to a Renewable Energy and Energy Efficiency Portfolio Standard (REPS) according to the following schedule:

<sup>&</sup>lt;sup>1</sup> The REPS provision for EMCs and municipals has a parallel construction.

<u>Calendar Year</u>	REPS Requirement
2012	3% of 2011 North Carolina retail sales
2015	6% of 2014 North Carolina retail sales
2018	10% of 2017 North Carolina retail sales
2021 and thereafter	12.5% of 2020 North Carolina retail sales

No party argued that intervening years, such as 2013, are devoid of any compliance obligation. There was a difference of opinion, however, regarding how to calculate the obligation in those non-specified years. All parties stated that the percentage requirements should apply in the year specified and in the subsequent intervening years until a new, higher percentage takes effect, as listed. So, for all electric power suppliers, 3% would be used in 2012, 2013 and 2014. The parties disagreed as to which year's retail sales that percentage should be applied against in order to calculate the REPS obligation.

In their comments, Dominion, Duke, NCEMC, GreenCo, ElectriCities and Progress argued that both the percentage and the sales year to which it is applied should progress in concert, with both increasing only in the stated years. Thus, for calendar years 2012, 2013 and 2014, an electric power supplier's REPS obligation would remain constant at 3% of 2011 retail sales. The obligation would be flat until 2015, when it would increase to 6% of 2014 retail sales, and again hold steady at that amount until 2018. The electric power suppliers asserted that the statute includes stair-step obligations because it is reasonable to expect that increases in the availability of renewable resources during the ramp up to the final compliance obligations "may not be linear." In addition, the electric power suppliers argued that their REPS obligations should be based on weather-normalized retail sales, rather than actual retail sales, in the stated year.

The Public Staff and NCSEA asserted that each year's REPS obligation should be calculated by using the electric power supplier's prior year's retail sales, even in the intervening years not specifically stated in the law. In its reply comments, the Public Staff asserted that the electric power suppliers' proposed approach would cause "the actual percentage of renewable (and of solar and swine resources) in the utility's generation mix" to decrease in the intervening years. Looking out well beyond 2021, "the stair steps would eventually descend to a level well below the 12.5% prescribed by G.S. 62-133.8(b)(1), because the final 12.5% REPS requirement would continue to be applied to 2020 sales, while actual sales continue to increase through the years."

In its reply comments, NCSEA argued that the approach advocated by the electric power suppliers would "lead to nonsensical and inconsistent results." For example, it would cause "compliance in year 2030 to be based on 12.5% of retail sales in 2020." NCSEA referenced the original draft of Senate Bill 3, which based each year's REPS obligation on retail sales "during the previous calendar year." NCSEA argued that, because the requirement in the stated years is clearly based on the prior year's sales, it is internally consistent to use this same approach in the intervening years for which the law is unclear. Further, when reviewing Senate Bill 3 in its entirety, the

General Assembly intended to "match growth in the [spending] cap based on previous year's sales to meet the growth in the compliance obligation that occurs based on the previous year's retail sales." NCSEA argued that the General Assembly did not intend for the portfolio standard to regress after 2022 while the funds provided under the spending cap continued to grow (due to growth in number of customer accounts).

Regarding the use of weather-normalized sales data, the Public Staff agreed with the electric power suppliers' proposal and suggested that the Commission require each electric power supplier to submit its weather normalization calculations for the previous year's retail sales and the resulting REPS and set-aside requirements early in each year for review and approval. NCSEA, however, opposed the electric power suppliers' proposal to use weather-normalized sales rather than actual sales for calculating their REPS obligations, stating that each electric power supplier's actual sales, as reported in its FERC Form 1 submittal due each April, should be the basis for its REPS obligation. In its reply comments, NCSEA stated that it had contacted more than 30 states that have renewable portfolio standards or goals in place, and that all of those states "indicated that they use actual retail sales, or load, and not weather normalized sales" to determine a utility's compliance obligation.

The Commission notes that the law is ambiguous regarding how to calculate the REPS obligation in the intervening years. After carefully considering the parties' comments and the REPS provisions of Senate Bill 3, the Commission concludes that each electric power supplier's REPS obligation should be based on its prior year's actual retail sales. Senate Bill 3 clearly established the annual spending caps based on the number of customer accounts an electric power supplier has at the end of the prior calendar year. Since the number of customer accounts generally increases year by year, the amount of funds an electric power supplier can spend toward REPS compliance will also increase year by year. The Commission believes the most reasonable interpretation of the ambiguous provisions of Senate Bill 3 is that in which the change in each electric power supplier's REPS obligation from year to year mirrors the increase in REPS funding from year to year.

Regarding the electric power suppliers' proposal to base their REPS obligations on weather-normalized sales data, the Commission finds no support for such an approach in any of the provisions of Senate Bill 3. Therefore, the Commission concludes that it is appropriate to base each electric power supplier's REPS obligation on its actual prior year's retail sales. The Commission notes that Senate Bill 3 allows electric power suppliers to bank certain renewable energy certificates for use in a future compliance year. This should allow electric power suppliers to manage an annual REPS obligation that varies from year to year due to the impact of weather on retail sales.

#### Solar and Swine Waste Set-Aside Obligations

The September 4, 2008 Order also asked what percentage and which year's North Carolina retail sales should be used to determine compliance with the solar energy and swine waste resource set-asides.

All parties agreed that it would be confusing and administratively burdensome to calculate the set-aside obligations based on <u>current</u> year sales, even though that interpretation could be read into the statute. Consistent with their position on the overall REPS requirement, the electric power suppliers argued that both the year and the percentage should move in concert, which would result in the set-aside obligations being flat for several years and then increasing in a stair-step fashion. The electric power suppliers' joint comments also raised concerns with the fact that the obligations for swine and poultry waste resource set-aside obligations are stated as statewide aggregates, making it difficult for an electric power supplier to discern its specific obligation. The electric power suppliers asserted that this raises antitrust law issues absent Commission oversight or direction.

NCSEA and the Public Staff stated that the set-aside obligations should be based on an electric power supplier's prior year's sales, consistent with their approach to establishing each electric power supplier's overall REPS obligation. NCSEA noted the Commission's efforts to establish a REC tracking system and stated that

for ease of administration, and thus less costly administration, of NC-RETS, the most common sense approach is to keep the percentage requirements and the base for those percentage requirements consistent across renewable energy resources being acquired and used for REPS compliance. Solar energy and swine waste resources will be used by ... utilities ... to comply with their overall REPS obligations. Therefore, the set-aside requirements for these resources ... should correspond to the schedule set forth for the overall REPS requirements .... If different schedules are adopted for the set-aside requirements, the costs ... will significantly and unnecessarily increase.

The Public Staff agreed with the electric power suppliers regarding the need to avoid antitrust issues, but did not believe the issue is within the scope of this proceeding.

The Commission notes that, unlike the overall REPS requirements of G.S. 62-133.8(b) and (c), the schedules stating the set-aside obligations for the initial years of each do not explicitly state the years' retail sales to which the percentages should be applied. Using current year sales is problematic for several reasons, including (1) an electric power supplier will not know its solar or swine waste resource obligations for a given year until after the year is over, and (2) it will be administratively confusing to have the set-aside obligations based on the current year's sales while the overall REPS obligation is based on the prior year's sales. It is much easier to establish systems and audit results when each year's set asides can be viewed as a subset of the same year's overall REPS obligation. In order to harmonize the various provisions of Senate Bill 3 and for the administrative reasons set forth by NCSEA, the Commission concludes that the set-aside obligations should be calculated in the same manner as the overall REPS obligations. That is, the set-aside obligations will be based on prior year's actual retail sales in North Carolina.

Lastly, the Commission agrees with the Public Staff that this proceeding is not the appropriate forum in which to address the electric power suppliers' antitrust concerns. The Commission notes that Duke has raised this concern, among others, in its November 3, 2008 Motion for Clarification in this docket and that the Commission has issued an Order allowing parties to file comments. The Commission, therefore, will consider the comments received in response to Duke's Motion before addressing this issue.

IT IS, THEREFORE, SO ORDERED.

ISSUED BY ORDER OF THE COMMISSION.

This the 26th day of November, 2008.

NORTH CAROLINA UTILITIES COMMISSION

Patricia Swenson

Patricia Swenson, Deputy Clerk

Kc112608.03

Commissioner Robert V. Owens, Jr., did not participate in this decision.

# 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 DUKE ENERGY
Session Law 2007-397	)	CAROLINAS, LLC, MOTION
	)	FOR CLARIFICATION

BY THE COMMISSION: On February 29, 2008, and March 13, 2008, the Commission issued Orders in this docket adopting rules to implement Session Law 2007-397 (Senate Bill 3) and the Renewable Energy and Energy Efficiency Portfolio Standard (REPS) in North Carolina. On or about September 2, 2008, the electric power suppliers began filing their initial REPS compliance plans pursuant to Commission Rule R8-67(b).

On November 3, 2008, Duke Energy Carolinas, LLC (Duke), filed a Motion for Clarification with regard to eleven issues concerning the interpretation of Senate Bill 3 to assist in its REPs compliance planning. On November 13, 2008, the Commission issued an Order inviting parties to provide written comments and reply comments on the issues raised by Duke.<sup>1</sup>

On or about December 19, 2008, comments were filed by Duke; Progress Energy Carolinas, Inc. (Progress); Virginia Electric and Power Company, d/b/a Dominion North Carolina Power (Dominion); ElectriCities of North Carolina, Inc. (ElectriCities); North Carolina Association of Electric Cooperatives, Inc. (NCAEC); GreenCo Solutions, Inc. (GreenCo); North Carolina Sustainable Energy Association (NCSEA); Fibrowatt, LLC (Fibrowatt); and the Public Staff.

On January 15, 2009, NCAEC petitioned to intervene in this proceeding <u>nunc protunc</u>, which petition was granted on January 30, 2009. The remaining commenters had previously been made parties to this docket.

<sup>&</sup>lt;sup>1</sup> On February 18, 2009, the Public Staff filed a Motion seeking clarification of six additional issues that it states either have arisen, or appear likely to arise, in connection with REPS compliance plans, REPS compliance reports, hydroelectric facility registration statements, and the Commission's Annual Report Regarding Renewable Energy and Energy Efficiency Portfolio Standard dated October 1, 2008 (2008 REPS Report). On February 26, 2009, the Commission issued an Order inviting parties to provide written comments and reply comments on the issues raised by the Public Staff. Those matters are pending and will be addressed in a subsequent order in this docket.

On January 23, 2009, Fibrowatt filed reply comments. On February 2, 2009, timely reply comments were filed by Duke, Progress, ElectriCities, NCSEA, and the Public Staff.

#### ISSUES FOR CLARIFICATION

## Priority of carve-out requirements

In its November 3, 2008 Motion, Duke sought clarification on the following two issues regarding the priority of the REPS carve-out, or set-aside, requirements:

- 1. Whether the carve-out requirements for solar, swine and poultry waste resources should receive priority over the acquisition of other renewable energy resources to achieve the general REPS requirement of 3% in 2012 and beyond?
- 2. Whether an electric power supplier should give priority to one carve-out requirement over another carve-out requirement (e.g., poultry waste vs. swine waste) in light of the per-account cost cap?

## Positions of the parties

Duke contends that the General Assembly did not impose a priority for the carve-out requirements. If an electric power supplier cannot comply with both the general REPS requirement and the carve-out requirements, it should make reasonable and prudent choices among resource options. Duke asserts that uncertainties associated with the amount of production to expect from intermittent technologies and dealing with smaller, less experienced generators means that, even with reasonable and prudent management, it might not be able to meet the carve-out and general REPS requirements without exceeding the cost cap. Duke states that its initial experience with swine and poultry waste resources indicates that there is a significant risk of exceeding the cost cap in order to meet the carve-out obligations: "[E]lectric power suppliers could be in a position where it would be reasonable and prudent to not sign certain contracts if signing them could push the Company over its cost caps."

Progress asserts that, while no one set-aside has a higher priority than the others, because the swine and poultry waste set-aside requirements are aggregate obligations, from a utility-specific basis the first priority should be given to solar. As regards swine and poultry waste, cost must be considered. Progress argues that an electric power supplier "should have the option to secure resources that meet the overall REPS requirements, particularly when exceeding cost caps are of concern, rather than securing a set-aside resource that may limit the ability to achieve the overall objectives."

Dominion notes that if an electric power supplier reaches the overall per-account cost cap provided for in G.S. 62-133.8(h), it is deemed to be in compliance with the REPS and need not satisfy either the carve-out or the general REPS requirement. The mix of the carve-out resources within the general REPS requirement should be

reasonably balanced and prudently allocated. Furthermore, Dominion argues that each obligation – the carve-out and the general REPS obligation – should receive a share of the available funding.

GreenCo and NCAEC assert that some preference for the carve-out resources may be appropriate when they are not disproportionately expensive.

ElectriCities contends that the general REPS requirement should receive priority and that, to meet this requirement, an electric power supplier must include energy from solar, poultry waste and swine waste. However, if an electric power supplier achieves the general REPS requirement, it should not be required to satisfy the maximum carve-out requirements as well. ElectriCities argues that Senate Bill 3 does not require that only RECs generated from carve-out renewable energy resources may be used to comply with the carve-out requirements. Nothing in the legislation or the Commission's rules identifies a REC with the renewable energy resource used to produce the energy with which the REC is associated, and any attempt to do so would be beyond the Commission's rulemaking authority.

Fibrowatt contends that the carve-out requirements should have priority over the general REPS requirement. Fibrowatt argues that the General Assembly

would not have specified minimums as to each of the carve-out resources only to then have them excluded by North Carolina electric power suppliers in favor of some other lower cost renewable resource that may have been available at the time of a power purchase.

#### Fibrowatt further asserts that

to meet the specific carve-out resource requirements set forth in [Senate Bill 3], those RECs should also be from the same specific source (i.e., a North Carolina electric power supplier must purchase poultry litter specific RECs, whether in-State or out-of-state, in order to satisfy the poultry litter carve-out requirement, etc.).

#### Fibrowatt requests that the Commission

clearly state in this proceeding that each electric power supplier is obligated to purchase enough power from the carve-out resources to meet their carve-out obligations. Only if, at some future time, circumstances cause electric suppliers to reach the annual cost cap are they excused from any further purchase from carve-out resources.

NCSEA takes no position, generally, with regard to the priority of the set-aside requirements, but notes that the solar set-aside requirement begins in 2010, two years before the other set-aside requirements and the general REPS requirement. "Therefore,

prior to 2012, it appears the General Assembly intended for the utilities to prioritize acquiring solar resources."

The Public Staff states that electric power suppliers should be required to comply with both the general REPS requirement and the carve-out requirements whenever it is possible to do so without reaching the utility-wide cost ceiling. In those instances where an electric power supplier can comply with either the general REPS requirement or the carve-out requirements, but not both, within the limits of the ceiling, the general REPS requirement should take priority. In these situations, the electric power supplier should bear the burden of proving that it could not have complied with both the general REPS requirement and the carve-out requirements. The Public Staff asserts that this interpretation adheres to the principle, well established in North Carolina law. "that statutes in pari materia, and all parts thereof, should be construed together and compared with each other. Such statutes should be reconciled with each other when possible ...." State ex rel. Hunt v. North Carolina Reinsurance Facility, 302 N.C. 274, 288, 275 S.E.2d 399, 405 (1981) (citation omitted). By reconciling the general REPS requirement with the carve-out requirements as fully as possible, and by giving one priority over the other only when absolutely necessary, the Commission can give effect to both provisions and most effectively carry out the legislative intent of the REPS. When it is unavoidably necessary to give priority to either the general REPS requirement or the carve-out requirements, the Public Staff asserts that fulfilling the general REPS requirement first is most consistent with the purpose of the statute. Under G.S. 62-2(10), which was added by Senate Bill 3, it is the policy of the State to promote the development of renewable energy and energy efficiency through the implementation of the REPS and, thereby, to diversify the State's energy resources. provide greater energy security through the use of energy sources indigenous to the State, encourage private investment in renewable energy and energy efficiency, and provide improved air quality. The Public Staff acknowledges that the carve-out requirements represent resource preferences set forth by the General Assembly. However, in cases where the electric power supplier can comply with the general REPS requirement or the carve-out requirements, but not both, without reaching the utilitywide ceiling, the electric power supplier will be able to support the development of more energy from more diverse renewable resources and sources if it adheres to the general REPS requirement. In addition, it will be able to meet customer demand without generating as much energy at its conventional power plants. As a result, its pollutant and greenhouse gas emissions will be reduced.

All parties agree that none of the carve-outs should be given priority over the others. Fibrowatt asserts that "this approach would include not over-purchasing one carve-out resource requirement without having fulfilled all other carve-out resource requirements, unless it is technically impossible to fulfill a specific carve-out resource requirement."

# Discussion and conclusions

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. 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.

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.

The Commission recognizes that electric power suppliers have already begun acquiring renewable energy and RECs in order to comply with the REPS requirement. Electric power suppliers should not be penalized for this early action, but should give appropriate priority to the set-aside requirements in future renewable energy and REC decisions.

#### Responsibility for aggregate carve-out requirements

In its November 3, 2008 Motion, Duke further sought clarification on the following two issues regarding each electric power supplier's obligation toward satisfying the aggregate REPS carve-out requirements:

3. What is Duke's obligation for the aggregate amount of swine waste resources needed to meet the REPS carve-out requirements in order to meet its obligations under the statute?

<sup>&</sup>lt;sup>2</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.

4. What amount of the aggregate REPS poultry waste carve-out is Duke responsible for achieving in order to meet its obligations under the statute?

# Positions of the parties

Duke, Progress, and Dominion argue that each electric power supplier has a pro rata obligation under the aggregate swine and poultry waste carve-out requirements that is proportional to its annual North Carolina retail sales. No electric power supplier should be required to purchase more than its pro rata share of the statewide carve-out requirements.

ElectriCities, GreenCo and NCAEC argue that a pro rata allocation by the Commission is inconsistent with Senate Bill 3, in which the General Assembly designated the swine and poultry waste carve-outs as single obligations to be met by all of the State's electric power suppliers in the aggregate. As ElectriCities states, "no individual compliance obligation is set forth in the REPS Legislation for any single electric power supplier." Instead, the electric power suppliers themselves should decide how much swine and poultry waste generation each should purchase.

ElectriCities further contends that the solar carve-out requirement is also an aggregate obligation and that the inclusion of the phrase "in the aggregate" in the poultry and swine waste carve-out language is redundant and irrelevant based on the use of the plural noun "suppliers" in G.S. 62-133.8(d). Moreover, since subsections (d) through (f) establish aggregate obligations and do not specify how much solar, swine waste and poultry waste generation is to be purchased by each electric power supplier, they are unconstitutional on the ground of vagueness. ElectriCities argues,

According to the North Carolina Supreme Court, "It is well established that an act of the General Assembly must be held void if it is so loosely and obscurely drawn as to be incapable of enforcement." Hobbs v. Moore County, 267 N.C. 665, 671, 149 S.E.2d 1, 5 (1966). ... [A]ny effort by the Commission to establish threshold requirements for individual electric power suppliers to comply [with the carve-out requirements] would be rewriting the statute – a function of the North Carolina General Assembly.

Fibrowatt argues that, to achieve the required level of supply from poultry waste in a timely manner, it is essential that the two large electric power suppliers act as anchors for the poultry waste-to-energy projects by executing power purchase agreements.

In its initial comments, the Public Staff argues, as does Duke, that each electric power supplier is obligated to meet its pro rata share of the swine and poultry waste carve-out requirements. In its reply comments, the Public Staff asserts that it would be entirely appropriate for the State's electric power suppliers to agree among themselves on how the aggregate swine and poultry waste obligations are apportioned among the various electric power suppliers. In requesting that the Commission apportion these

obligations among electric power suppliers on a proportional basis. Duke has, in essence, proposed a tentative apportionment plan to be used until such time as the State's electric power suppliers are able to agree on a different method. If at any time the electric power suppliers jointly present the Commission with a workable and mutually agreed-upon plan for apportioning the carve-out obligations on a non-proportional basis, the Commission should consider it. However, there are many electric power suppliers in the State, and there can be no assurance that they will all be able to agree on an apportionment plan. The Public Staff further states that it is concerned that if the apportionment of the carve-out obligations is left entirely up to the electric power suppliers, they may find themselves unable to reach agreement as the deadline for compliance approaches, and ultimately they may not comply with the carve-out requirements at all. By adopting an apportionment of the swine and poultry waste carve-out obligations, subject to modification, the Commission can protect against the possibility that implementation of the carve-out requirements may not occur.

The Public Staff further argues that ElectriCities' contention that the solar carve-out provision imposes a single aggregate obligation on all the State's suppliers, just as the swine and poultry waste carve-out provisions do, is inconsistent with the wording of the statute. The inclusion of the phrase "in the aggregate" in subsections (e) and (f) of G.S. 62-133.8, the swine and poultry waste carve-out provisions, and the omission of that phrase in subsection (d), the solar carve-out provision, demonstrates the General Assembly's intent to treat the solar carve-out requirement differently from the swine and poultry waste carve-out requirements. Lastly, the Public Staff disagrees with ElectriCities' contention that the carve-out provisions are void for vagueness. The case relied upon by ElectriCities further states the universally recognized principle that "[w]here a statute is susceptible of two interpretations, one of which will render it constitutional and the other will render it unconstitutional, the former will be adopted." Hobbs, 267 N.C. at 671, 149 S.E.2d at 5. By adopting a reasonable interpretation that specifies the obligation of each supplier, the Commission can eliminate the question of the constitutionality of G.S. 62-133.8(d)-(f).

#### Discussion and conclusions

After careful review, the Commission determines that, 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. As the Commission stated in its 2008 REPS Report, it "expects the electric power suppliers to work together to collectively meet the aggregate obligation and comply with G.S. 62-133.8(e) and (f)." 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.

The Commission further concludes, for the reasons set forth by the Public Staff, that the solar set-aside requirement applies individually to each electric power supplier and that it is not, as ElectriCities argues, an additional aggregate obligation.

Lastly, the Commission determines that the aggregate set-aside provisions are not void for vagueness, as argued by ElectriCities. 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). Third, 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 setaside 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. Thus, with the limitation imposed by the per-account cost cap, the failure of the electric power suppliers, collectively, to meet the aggregate setaside requirements does not necessarily mean that a particular electric power supplier has failed to comply with its REPS obligation under Senate Bill 3. Rather, the Commission will take enforcement actions, where necessary, and annually apprise the legislature of the electric power suppliers' efforts to comply with all aspects of the REPS requirement, including the swine and poultry waste set-aside requirements.

## Collaborative efforts to comply with aggregate carve-out requirements

In its November 3, 2008 Motion for Clarification, Duke sought clarification on the following potential antitrust issue regarding the REPS carve-out requirements:

5. To clarify that joint procurement or other collaborative efforts among electric power suppliers to obtain resources to meet the state-wide poultry waste and swine waste carve-out requirements is clearly articulated and affirmatively expressed as a State policy, and that the Commission believes that its oversight of REPS compliance constitutes active supervision by the State of this policy.

# Positions of the parties

All parties, other than Fibrowatt, agree that the electric power suppliers should be allowed to engage in joint procurement or other collaborative efforts to obtain resources to meet the swine and poultry waste carve-out requirements. Most parties also agree however, that, to avoid the risk that the electric power suppliers would be found to have acted in violation of federal antitrust laws by doing so, the Commission should not merely authorize them to jointly purchase swine and poultry waste generation, but should actively organize and control the joint procurement effort.

Dominion states that it supports the idea of joint procurement or other collaborative efforts among electric power suppliers, but that there is a need for further

guidance from the Attorney General's Office and the Commission on this issue. As Dominion states in its comments,

It is possible that any coordinated activity by the utilities in the purchasing of swine or poultry waste could be considered a violation of state and federal antitrust laws. As a general matter, there is a state action immunity exception to such antitrust violations. Under this exception, there must be 1) a clearly articulated state policy replacing competition with regulations, and 2) active supervision by the State. [Parker v. Brown, 371 U.S. 341 (1943).] Because it is an exception to the antitrust laws the exception will be narrowly construed.

Duke requests that the Commission recognize that collaboration by electric power suppliers is necessary to meet the carve-out requirements and states that the Commission should supervise that collaboration consistent with the "state action" immunity doctrine under antitrust laws. Duke notes that each electric power supplier will be at a different point with regard to resource acquisition and cost caps based on its decisions to procure other resources. If the Commission pursues control of joint procurement arrangements, the electric power suppliers need flexibility to decide the level at which each would like to participate and at what price in order to observe each electric power supplier's cost cap.

In its reply comments, Progress states,

A collaborative procurement process under the control of the Commission may not be feasible because if one portion of the REPS procurement process is managed by the Commission, then all other aspects may also need to be managed by the Commission. All renewable generation purchased to satisfy [Senate Bill 3] must be viewed from a portfolio perspective. It is not feasible for the Commission, or any other entity, to manage one component of compliance without being intimately involved in planning to comply with all other requirements, including the overall cost caps.

GreenCo and NCAEC suggest that, to avoid antitrust concerns, the Commission should "clearly and unambiguously ... establish a structure for meaningful and active on-going oversight of all collaborative activities ... and then actually engage in such actual oversight in furtherance of the public interest."

Fibrowatt proposes that the Commission adopt an "anchor tenant" arrangement, under which the two largest utilities – Duke and Progress – would each act as the anchor tenant for a poultry waste-fueled power plant and the smaller electric power suppliers would then buy the remaining output. Fibrowatt further expresses "significant concerns" regarding the potential for delay with a stakeholder process as suggested by some parties.

The Public Staff states that Fibrowatt's proposal may well be workable, provided the utilities are willing to serve as anchor tenants. However, the anchor tenant idea is not necessarily inconsistent with the development of a joint procurement system. With the agreement of Fibrowatt and the host utility, the joint procurement entity could enter into a contract to purchase all or a portion of the output of Fibrowatt's plant and have the electric energy delivered to the host utility. Depending on the circumstances, such an arrangement potentially could be as satisfactory to all interested parties as a simple purchase contract between Fibrowatt and the host utility.

## Discussion and conclusions

As noted above, any collaborative effort among the electric power suppliers to meet the aggregate set-aside requirements must be (1) undertaken pursuant to a clearly articulated state policy, and (2) actively supervised by the state itself. California Liquor Dealers v. Midcal Aluminum. 445 U.S. 97, 105 (1980) (applying the standard established in Parker). The first prong of this test is satisfied by the enactment of the aggregate set-aside requirements of G.S. 62-133.8(d) and (e). However, the State cannot give immunity from violations of the antitrust laws simply by authorizing the electric power suppliers to violate them or by declaring that their action is lawful. Parker, 317 U.S. at 351. The state must actively supervise the activity in question, as provided in the second prong of the "state action" immunity standard.

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.

#### Use of RECs to comply with carve-out requirements

In its November 3, 2008 Motion, Duke further sought clarification on the following issue regarding the use of RECs to satisfy the REPS carve-out requirements:

6. Whether an electric power supplier may satisfy the specific carve-out requirements (e.g., solar, swine and poultry) through the purchase of unbundled RECs from either in-state or out-of-state renewable energy facilities? If out-of-state RECs can be used to meet the carve-out requirements, could an electric power supplier meet 100% of these carve-out requirements with out-of-state

RECs, provided that doing so would entail utilizing out-of-state RECs for no more than 25% of its overall renewable energy requirement (or, would the 25% out-of-state limit be applied to each individual carve-out requirement)?

## Positions of the parties

Duke first requests that the Commission clarify that an electric power supplier is permitted to use unbundled RECs to meet the carve-out requirements, noting that swine waste resources, for example, are disproportionately distributed outside of its service area. Duke states that the use of unbundled RECs would avoid unnecessary wheeling costs. A swine or poultry waste-fueled generator, therefore, would interconnect with its electric power supplier and sell its electric output to that utility at an avoided cost rate. The generator would sell the RECs separately to electric power suppliers to meet the carve-out requirements.

Duke further argues that it is allowed to meet the carve-out requirements through the purchase of in-State or out-of-state RECs, subject to the limitation in G.S. 62-133.8(b)(2)(e) that no more than 25% of any one carve-out requirement may be met though the purchase of out-of-state RECs. Under G.S. 62-133.8(b)(2)(d), renewable energy delivered within Duke's service territory constitutes an in-State resource. If the delivered energy is generated outside of North Carolina and the RECs associated with that energy are unbundled or subsequently sold by the electric power supplier, or if energy is not delivered to the service territory of an electric public utility operating in the State, then, argues Duke, the RECs are considered out-of-state and would be subject to the 25% limitation. Duke asserts that its position harmonizes these statutory provisions consistent with the policy goals of Senate Bill 3 and allows electric power suppliers to utilize out-of-state RECs to meet a portion of their requirements while promoting investment in renewable resources with the State.

Progress and ElectriCities similarly argue that RECs acquired from either in-State or out-of-state sources may be used to meet the set-aside requirements. They argue, however, that the limit on out-of-state RECs is an aggregate limit applicable to the overall REPS requirement and does not apply to the individual set-aside requirements.

Dominion notes that the limitation on out-of-state RECs does not apply to it because it has less than 150,000 North Carolina customers. Therefore, Dominion may meet any portion of its carve-out and overall REPS requirements with out-of-state RECs.

GreenCo and NCAEC state that, in order to manage compliance costs, electric power suppliers should be allowed to use in-State or out-of-state resources to meet the carve-out requirements, and that the use of out-of-state resources "should not count against the 25% limitation applied to out-of-state resources of any electric power supplier."

NCSEA states, as does Duke, that electric power suppliers may meet up to 25% of their set-aside requirements through the purchase of out-of-state RECs. NCSEA further argues, however, based on the language of the carve-out provisions requiring

that a certain amount "of the total electric power in kilowatt hours sold to retail electric customers in the State" be supplied by the carve-out resource, that unbundled out-of-state RECs may not be used to satisfy the carve out requirements unless it can be shown that the associated energy was also sold to in-State retail electric consumers. An unbundled out-of-state REC does not carry the presumption that the underlying electric energy ultimately reached retail customers in North Carolina. In its reply comments, NCSEA states that RECs originating from out-of-state, whether bundled or unbundled, cannot be used to satisfy any part of the carve-out requirements. NCSEA argues,

These limitations on the use of out-of-state RECs to meet the carve-out requirements are fully understandable given the evident purpose of each carve-out. For example, the hog waste and poultry litter carve-outs were adopted to address well-recognized solid waste problems and nutrient loading issues associated with large scale agricultural operations in North Carolina. Plainly, the General Assembly would not have intended its legislative effort to address these recognized in-state (indeed, local) problems to be directly undermined by allowing the use of out-of-state bundled or unbundled RECs to meet the carve-out requirements.

The Public Staff asserts that the 25% restriction applies only to the general REPS requirement, and that an electric power supplier may satisfy the carve-out requirements entirely with out-of-state RECs. The Public Staff states that if the 25% restriction is applied to the carve-out requirements as well as to the general REPS requirement, the cost to comply will be higher, resulting in higher charges to be paid by customers.

#### Discussion and conclusions

After careful review, the Commission determines that the set-aside requirements may be met by any of the means enumerated in G.S. 62-133.8(b)(2), with regard to electric public utilities, or G.S. 62-133.8(c)(2), with regard to electric membership corporations or municipalities. This includes not only the generation or purchase of renewable energy and the acquisition, thereby, of bundled RECs, but also the purchase of unbundled RECs associated with energy derived from the particular set-aside resource. In its February 29, 2008 Order Adopting Final Rules, the Commission stated that "REPS compliance should be based, to the extent possible, solely on RECs."

As stated previously, however, any limitations stated in the specific set-aside provisions must prevail over the general REPS provisions. Subsections (d), (e), and (f) each state that a certain amount "of the total electric power in kilowatt hours sold to retail electric customers in the State shall be supplied by" the set-aside resource.<sup>3</sup>

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 that use one or more of the

<sup>&</sup>lt;sup>5</sup> Subsection (d), the solar set-aside provision, provides, in part:

Several parties assert that the phrase "kilowatt hours sold" simply establishes the amount of each set-aside requirement, and that the amount of energy thus calculated must be "supplied" by the particular set-aside resource. NCSEA argues that the General Assembly intended that the energy "supplied by" the particular set-aside resource must actually be "sold to retail electric customers in the State." The resolution of this issue determines the extent to which, if any, out-of-state energy or RECs may be used to meet the set-aside requirements.

والمراجعين

The Commission is persuaded that the intent of the set-aside provisions is to address renewable energy resources and issues indigenous to North Carolina, and, therefore, to foster development specifically of local renewable energy facilities. Because an electric public utility may serve customers outside of North Carolina, yet operate its system on an integrated basis, any renewable energy delivered to a North Carolina electric public utility is deemed to supply power to customers in North Carolina. See G.S. 62-133.8(b)(2)(d). Thus, while the 25% limitation applies only to the general REPS requirement and not to the specific set-aside requirements, the energy associated with the RECs acquired to satisfy the set-aside requirements must be generated by or delivered to an electric power supplier.

The alternatives to this conclusion would allow the energy or RECs to come from any renewable energy facility with the 25% limitation applying either (1) to each setaside requirement, or (2) only to the general REPS requirement. Subdivisions G.S. 62-133.8(b)(2)(e) and (c)(2)(d) state that RECs derived from out-of-state facilities shall not be used to meet more than 25% "of the requirements of this section." The referenced "section" must either be Section 2(a) of the bill or "sections" (b) and (c) of G.S. 62-133.8 - in either case, the reference is to the general REPS obligation. Other provisions of the REPS statute further demonstrate that the reference to "this section" is a reference to Section 2(a) of the bill or, as codified, G.S. 62-133.8, For example, subsections (h) and (i) contain numerous references to "subsections (b), (c), (d), (e), and (f) of this section." Paragraphs numbered (a), (b), (c), etc. are consistently referred to as "subsections"; therefore, "this section" is a reference to Section 2(a), or G.S. 62-133.8. Thus, because the reference to "this section" is a reference only to the general REPS obligation, the set-aside requirements could be satisfied in whole through out-of-state purchases resulting in no benefit for North Carolina swine or poultry operations. In addition, RECs to satisfy the solar set-aside requirement would be

following applications: solar hot water, solar absorption cooling, solar dehumidification, solar thermally driven refrigeration, and solar industrial process heat.

Subsection (e), the swine waste set-aside provision, provides, in part:

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 shall be supplied, or contracted for supply in each year, by swine waste.

Subsection (f) the poultry waste set-aside provision, provides, in part:

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

obtained from less expensive projects in other states, such as those in the Southwest. The most reasonable interpretation, then, is that the General Assembly intended, by the language of the set-aside requirements, to more narrowly require that the RECs acquired to satisfy the set-aside requirements be associated with renewable energy either generated by or delivered to an electric power supplier.

#### Behind-the-meter customer generation located in out-of-state service area

In its November 3, 2008 Motion for Clarification, Duke sought clarification on the following issue regarding out-of-state customer-owned renewable generation:

7. G.S. 62-133.8(b)(2)(d) recognized that purchased power from new renewable energy facilities located outside the geographic boundaries of the State meet the requirements if the power is delivered to an electric power supplier in the State. If one of Duke's South Carolina customers offsets its load as a result of the use of a new renewable energy resource, the effect is the same as a sale of such renewable energy to the Company. Therefore, if this South Carolina customer sells the RECs associated with such power to the Company, will these RECs be treated as "in-state" RECs under G.S. 62-133.8(b)(2)(e)?

## Positions of the parties

Duke and Progress contend that RECs purchased by a North Carolina electric public utility from one of its customers located outside of North Carolina that generates electric power for its own use from renewable resources should be treated as "in-State" resources and should not count toward the 25% limitation on out-of-state RECs.

Duke states that, because its North and South Carolina service territories are served by its integrated electric system, the development of renewable energy facilities in South Carolina, whether or not they deliver energy to Duke's system, offsets the load for electricity in North Carolina. Thus, RECs purchased from such projects, whether or not they deliver energy to Duke's system, should be considered "in-State" resources for REPS compliance.

Progress asserts that the 25% limitation on out-of-state RECs in G.S. 62-133.8(b)(2)(e) "was meant to distinguish between bundled energy and RECs acquired from sources within the power supplier's service area, even if in another state, as opposed to RECs acquired from any out-of-state source, such as wind from the midwest." Progress argues that G.S. 62-133.8(b)(2)(d)

provides that a new renewable energy facility located outside the geographic boundaries of North Carolina (the "State") which delivers electric power to a public utility that provides electric power to retail customers in the State meets the requirements of the portfolio standard. This section clearly establishes that a new renewable energy facility

electrically connected to a public utility provides equal benefit regardless of geographic boundary and thus is seen as an "in-state" resource.

It follows that since a kWh produced by such a new renewable energy facility is considered in-state, then RECs associated with the electricity or equivalent energy, should also be considered in-state RECs

Any other interpretation of G.S. Section 62-133.8 will lead to an absurd result.

NCSEA and Fibrowatt assert that renewable energy generated outside the State should not be treated as an in-State resource unless the electric energy associated with the RECs is actually purchased by an electric public utility that serves customers in North Carolina. In that case, the customer-generator would be deemed to be an "in-State" resource under G.S. 62-133.8(b)(2)(d). Thus, as NCSEA states, only RECs bundled with energy that is delivered to an electric public utility with North Carolina retail electric customers are appropriately considered "in-State" RECs.

In its initial comments, the Public Staff takes the same position as NCSEA and Fibrowatt that unbundled out-of-state RECs purchased from the customer of a North Carolina electric public utility should not be considered as "in-State" pursuant to G.S. 62-133.8(b)(2)(d). The Public Staff states its belief

that in addressing this issue the Commission should take into account the purposes of the REPS statute, as set forth in G.S. 62-2(10). ... Renewable energy serves to protect the State's environment by reducing emissions of pollutants and greenhouse gases. The benefit of lower greenhouse gas emissions is a reduction in global warming, and when renewable energy use results in reduced greenhouse gas emissions, the benefit to North Carolina is the same regardless of whether the reduced emissions occur in this State or elsewhere. However, with respect to all the other purposes of the REPS statute – reduced pollutant emissions, diversification of energy resources, increased energy security, and promotion of the State's economy – the State benefits more, and thus the purposes of the statute are accomplished more effectively, from in-state renewable energy use than from out-of-state use.

Since renewable energy use achieves the statutory purposes most effectively when it occurs within the State, the Public Staff concludes that the line between in-state and out-of-state renewable energy resources should be drawn just where the General Assembly drew it. In other words, renewable electric energy generated outside the State and delivered to the system of a North Carolina electric utility should qualify for the REPS, as the General Assembly directed in paragraph (b)(2)(d); but the Commission should not go any further than this in allowing out-of-state renewable energy to be treated as in-state.

In its reply comments, however, the Public Staff states that it is persuaded by the utilities' arguments and recommends the Commission allow out-of-state customergenerated RECs to count as "in-State" resources.

#### Discussion and conclusions

After careful review, the Commission concludes, based on the plain language of the statute. 4 that RECs associated with out-of-state renewable generation not delivered to and purchased by an electric public utility in North Carolina should not be considered to be "in-State" RECs for the reasons set forth by the Public Staff in its initial comments. While the effect may be the same in reducing the need for conventional generation. whether or not the customer's renewable electric generation is delivered to the utility, the General Assembly set forth specifically enumerated means in G.S. 62-133.8(b)(2) for an electric public utility to meet its REPS obligation. Pursuant to subdivision (b)(2)(d), an electric public utility may "[p]urchase electric power from a new renewable energy facility." That subdivision further establishes a limited exception to the limitation on the reliance on out-of-state resources for energy (and bundled RECs) purchased from a new renewable energy facility located outside of North Carolina but that delivers its energy to the purchasing utility. Subdivision (b)(2)(e), on the other hand, allows an electric public utility to meet its REPS obligation by purchasing unbundled RECs "derived from in-State or outof-state new renewable energy facilities." Subdivision (b)(2)(e) further establishes a limit on the use of RECs derived from out-of-state facilities used to meet a utility's REPS obligation. These provisions cannot be read together to allow unbundled RECs to be considered "in-State" and not subject to the 25% limitation on out-of-state RECs because the electric public utility is not purchasing electric power from the renewable energy facility. The Commission, therefore, agrees with the Public Staff that the line should be drawn just where the General Assembly drew it. This line is unambiguous from a plain reading of G.S. 62-133.8(b)(2).

<sup>&</sup>lt;sup>2</sup> G.S. 62-133.8(b)(2)(d) and (e) provide as follows:

<sup>(2)</sup> An electric public utility may meet the requirements of this section by any one or more of the following:

d. 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.

e. 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 an electric public utility with less than 150,000 North Carolina retail jurisdictional customers as of December 31, 2006.

# Sale of excess RECs

In its November 3, 2008 Motion, Duke sought clarification on the following issue regarding the sale of RECs:

8. In the event that Duke develops a surplus of RECs, can the Company sell excess RECs to other parties at any point before RECs are retired?

## Positions of the parties

All parties who expressed an opinion on this issue appear to agree that a supplier may sell excess RECs, subject to the limitations of G.S. 62-133.8(b)(2)(d).

Duke additionally cites Commission Rule R8-67(e)(10): "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 cost from customers."

GreenCo and NCAEC agree that sales of excess RECs will be essential, but the Commission should be mindful of the potential for abusive exercise of market power.

ElectriCities maintains that "nothing in either subsection [G.S. 62-133.8(b)(2)(f) or (c)(2)(f)] addresses the 'life of a REC.'"

NCSEA asserts that RECs may only be used for two years. NCSEA cites the statutory language in G.S. 62-133.8(b)(2)(f) — "as a credit towards the requirements of this section in the following calendar year" — as demonstrating that the General Assembly intended that the life of a REC be limited to two years.

#### Discussion and conclusions

The question of REC vintage was extensively debated in the development of the Commission's rules implementing Senate Bill 3 and thoroughly discussed in the Commission's February 29, 2008 Order Adopting Final Rules. During that process, the Commission was careful not to take any action that would restrict the marketability of unbundled RECs. Therefore, in response to Duke's specific question, the Commission affirms that an electric power supplier, or any other entity, may, at any time, sell a REC it owns that has not been retired.

Although a REC may be sold at any time, it may only be used for compliance by an electric power supplier if it was acquired by that electric power supplier within three years of its creation. Commission Rule R8-67(d)(1). Once acquired, a REC may be held indefinitely by an electric membership corporation or municipality or, for an electric public utility, for up to seven years after cost recovery. <u>Id</u>. Therefore, while it may be permissible to sell a REC that was created more than three years ago and that has value for REPS compliance in the hands of its current owner, it is possible that no electric power supplier in North Carolina will offer to purchase the REC since it may not,

at that time, be claimed for REPS compliance by the subsequent purchaser. That does not mean that there is no market for a REC more than three years after its creation, but it cannot be claimed for REPS compliance by an electric power supplier in North Carolina if it is acquired after that time.

Lastly, the banking provisions of G.S. 62-133.8(b)(2)(f) and (c)(2)(f) do not limit the life of a REC to two years, as NCSEA argues, but simply provide that a REC may be banked and carried forward for any period of time. <u>Each</u> year, after an electric power supplier retires sufficient RECs to meet its REPS requirement, it is allowed to carry forward certain excess RECs "as a credit towards the requirements of this section in the <u>following</u> calendar year." (Emphasis added.)

#### Fuel use by poultry or swine waste renewable energy facility

In its November 3, 2008 Motion for Clarification, Duke further sought clarification on the following issue regarding credit for the use of a fuel other than a renewable energy resource:

9. If a poultry waste or swine waste generator utilizes some other fuel, other than poultry waste or swine waste, as part of its fuel supply, will 100% of the generator's output qualify towards the respective poultry waste or swine waste carve-out?

## Positions of the parties

Progress, Dominion, ElectriCities, NCSEA, and the Public Staff contend that a swine or poultry waste-fueled generator that burns fuels other than swine or poultry waste should receive credit toward the swine or poultry waste set-aside requirements only for the portion of its output attributable to the poultry or swine waste.

Duke recommends that the Commission establish fuel parameters that are technologically and commercially feasible with respect to poultry waste projects and then allow 100% of the output to qualify for the carve-out requirement, even if some of the fuel used is not poultry waste. Duke asserts that, unless the entire output of a poultry wastefueled facility counts toward compliance, "it will be difficult, if not impossible," for electric power suppliers and poultry waste-fueled generators to reach agreement. Duke asserts that it has not encountered this issue yet with respect to swine waste projects and is not sure as to whether such an approach is also needed with swine waste.

## In its comments, Progress states that

in those cases where the use of poultry or swine waste as the primary fuel requires the addition of a relatively small amount of some other renewable fuel in order to achieve proper combustion, then all the generation output should qualify towards the respective set-aside. However, if poultry or swine waste is co-fired with another primary fuel, then only the energy

generated by the poultry or swine waste, determined as a percentage of fuel input, should qualify towards the respective set-aside. The facilities registration statement required by Commission Rule R8-66 should specify the renewable energy resources used by the renewable energy facility.

GreenCo and NCAEC support allowing the entire output of a swine or poultry waste-fueled generator to qualify for the applicable carve-out requirement, even if the generator uses a limited amount of some other fuel.

Fibrowatt, on the other hand, proposes that the Commission adopt a rule based on a federal tax regulation under which a generating plant is considered to be a "solid waste facility," and is permitted to utilize tax-exempt debt, if at least 65% of its total fuel, by weight or volume (determined annually), is solid waste. Thus, all of a poultry wastefueled facility's electric output would be deemed to be poultry waste-fueled generation so long as at least 65%, by weight or volume (determined annually), of the total fuel is poultry waste ("excluding fuel used for startup, shutdown or flame stabilization, which is required to allow operations in accordance with prudent industry practices"), and the remaining fuel consists of biomass or other renewable energy resources.

The Public Staff notes that, under G.S. 62-133.8(f), when "wood shavings, straw, rice hulls, or other bedding material" are used as fuel at a poultry waste-fueled generation facility, they must be treated in the same way as poultry waste. The Public Staff recognizes that, in order for Fibrowatt or other poultry waste-fueled generators to be profitable in North Carolina, it may be necessary for them to burn some extraneous materials beyond those specifically listed in G.S. 62-133.8(f), while retaining the right to have their entire output qualify for the poultry waste carve-out requirement. However, the statute is very specific as to the extraneous materials that may be combined with poultry waste to comply with the carve-out, and Fibrowatt is essentially asking the Commission to revise the statute. Under G.S. 62-133.8(i)(2), the Commission does have power "to modify ... 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," and Fibrowatt could appropriately put forward its proposal in a petition pursuant to subsection (i). In this rulemaking proceeding, however, the Public Staff believes the Commission should apply the statute as written.

# Discussion and conclusions

After careful review, the Commission determines, based on a plain reading of the statute, that only that portion of the energy generated at a swine or poultry waste-fueled facility attributable to the swine or poultry waste, including, in the case of poultry waste, "wood shavings, straw, rice hulls, or other bedding material," may receive credit toward the set-aside requirements. Commission Rule R8-67(d)(2) provides that, for any facility that uses both renewable energy resources and nonrenewable energy resources to produce energy, the facility shall earn RECs based only upon the energy derived from the renewable energy resources in proportion to the relative energy content of the fuels used. Similarly, 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.

## Renewable thermal energy located in out-of-state service area

Lastly, in its November 3, 2008 Motion for Clarification, Duke sought clarification on the following two issues regarding the use of RECs associated with out-of-state thermal energy production:

- 10. Whether thermal energy (and the REC equivalent) produced from a renewable energy resource would qualify as an in-State resource even if the renewable resource is located in the South Carolina portion of the Company's service territory?
- 11. Whether thermal energy (and the REC equivalent) from a renewable resource that is located within the South Carolina portion of another electric power supplier's service territory who is subject to the REPS would qualify as an in-State resource (e.g., a facility within Progress's South Carolina service territory)?

## Positions of the parties

Duke and Progress contend that, for the same reason that out-of-state behind-the-meter generation offsets load on the utility's system as a whole, thermal RECs purchased from a renewable energy facility located in an electric public utility's out-of-state service territory benefit North Carolina customers and, therefore, should count toward the REPS requirements as "in-State" resources. Duke and Progress do not believe, however, that RECs derived from thermal energy produced from a renewable resource located within the out-of-state portion of another utility's service territory should similarly be considered an "in-State" resource.

Fibrowatt asserts that renewable energy generated outside the State should not be treated as an in-State resource, except for bundled electric energy delivered to the system of a utility that serves customers in the State, which is considered an in-State resource under G.S. 62-133.8(b)(2)(d).

NCSEA argues that thermal RECs associated with energy produced in any electric public utility's out-of-state service area should be considered an in-State resource. NCSEA states that

[t]he measurable thermal energy, and the REC equivalent, produced from a new renewable energy resource located in an electric public utility's South Carolina service territory would qualify as an "in-state" resource for the North Carolina REPS provided that the REC equivalent is bundled with the thermal energy and the thermal energy is delivered to the utility.

In its initial comments, the Public Staff states, for the same reason that other out-of-state RECs should not be considered an "in-State" resource, that out-of-state customer-generated thermal RECs should not be considered as "in-State." In its reply comments, the Public Staff states that it is persuaded by the utilities' arguments and recommends the Commission allow out-of-state customer-generated thermal RECs to count as "in-State" resources for the electric public utility that serves the customer.

## Discussion and conclusions

After careful review, the Commission concludes, for the same reasons that apply to other unbundled out-of-state RECs, that RECs associated with out-of-state thermal energy should not be considered as "in-State" and not subject to the 25% limitation on out-of-state RECs. Because no electric power is being purchased from such a facility, the exception established in G.S. 62-133.8(b)(2)(d) is inapplicable.

IT IS, THEREFORE, SO ORDERED.

ISSUED BY ORDER OF THE COMMISSION.

This the 7th day of May, 2009.

NORTH CAROLINA UTILITIES COMMISSION

Hail L. Mount

Gail L. Mount, Deputy Clerk

Kc050709.04

Commissioner Robert V. Owens, Jr., concurs in part and dissents in part in this decision.

## DOCKET NO. E-100, SUB 113

COMMISSIONER ROBERT V. OWENS, JR., CONCURRING IN PART, DISSENTING IN PART: I concur with this Order, with the exception of the majority's decision to give the carve-out requirements for solar, swine and poultry waste resources a higher priority than the general REPS requirements (such as the requirement that electric public utilities secure 3% of their energy from renewable resources in 2012). I oppose the majority's decision in this regard because I believe it will result in North Carolina consumers paying more, and receiving less, for electricity generated by renewable resources than would otherwise have been the case.

\s\ Robert V. Owens, Jr.

Commissioner Robert V. Owens, Jr.

# 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 OF
Session Law 2007-397 ) CLARIFICATION

BY THE CHAIRMAN: On May 7, 2009, the Commission issued an Order on Duke Energy Carolinas, LLC (Duke), Motion for Clarification in the above-captioned docket. On page 21 of that Order, in response to questions 10 and 11 of Duke's Motion regarding renewable thermal energy located in the out-of-state service area of an electric public utility, the Commission concluded "that RECs [renewable energy certificates] associated with out-of-state thermal energy should not be considered as 'in-State' and not subject to the 25% limitation on out-of-state RECs."

To avoid confusion that might arise from this sentence, the Chairman finds good cause to issue this Order rewording the sentence, so that the paragraph in which it appears now reads as follows:

After careful review, the Commission concludes, for the same reasons that apply to other unbundled out-of-state RECs, that RECs associated with out-of-state thermal energy should not be considered as "in-State" RECs, but should be considered as unbundled out-of-state RECs subject to the 25% limitation in G.S. 62-133.8(b)(2)(e). Because no electric power is being purchased from such a facility, the exception established in G.S. 62-133.8(b)(2)(d) is inapplicable.

IT IS, THEREFORE, SO ORDERED.

ISSUED BY ORDER OF THE COMMISSION.

This the 8th day of May, 2009.

NORTH CAROLINA UTILITIES COMMISSION

Hail L. Mount

Gail L. Mount, Deputy Clerk

Kc050809.01

# STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. E-100, SUB 113

## BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of		
Rulemaking Proceeding to Implement	)	ORDER ON PUBLIC STAFF'S
Session Law 2007-397	)	MOTION FOR CLARIFICATION

BY THE COMMISSION: On February 29, 2008, and March 13, 2008, the Commission issued Orders in the above-captioned docket adopting rules to implement Session Law 2007-397 (Senate Bill 3) and the Renewable Energy and Energy Efficiency Portfolio Standard (REPS) in North Carolina.

On or about September 2, 2008, the electric power suppliers began filing initial REPS compliance plans pursuant to Commission Rule R8-67(b). In their 2008 REPS compliance plans, filed as part of their 2008 integrated resource plans (IRPs), Duke Energy Carolinas, LLC (Duke), and Carolina Power & Light Company, d/b/a Progress Energy Carolinas, Inc. (PEC), indicated that they intend to use all hydroelectric power generated on their systems, including power generated at large dams, for REPS compliance. On January 29, 2009, Duke submitted information to the Commission to register as renewable energy facilities 30 of its hydroelectric generating units that are each 10 megawatts (MW) or less.<sup>1</sup>

Several entities filed letters with the Commission in response to Senatė Bill 3 stating that they are full requirements customers of the Tennessee Valley Authority (TVA) and, therefore, are "not required to meet the portfolio mix requirements of the NC REPS because of federal supremacy."<sup>2</sup>

On August 28, 2008, New River Light & Power Company (New River), which operates as a subsidiary of Appalachian State University (ASU), filed a letter stating that it could comply with the REPS requirement through its wholesale purchases if it were recognized as a "municipality" under Senate Bill 3.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> See Docket No. E-7, Subs 872, 873, 877, 880, 884, 886, 887,888, 889, 892, 895, 896, 900, 901, 903, 904, 905.

<sup>&</sup>lt;sup>2</sup> These entities include Murphy Electric Power Board, Mountain Electric Cooperative, Blue Ridge Mountain Electric Membership Corporation, and Tri-State Electric Membership Corporation.

<sup>&</sup>lt;sup>3</sup> Although Westem Carolina University appears to have made no similar filing, in a letter filed with the Commission by Rutherford Electric Membership Corporation on August 27, 2008, Rutherford states:

As part of its portfolio of resources, Duke plans to provide services including delivery of renewable energy resources to certain wholesale customers to meet the REPS requirements. These wholesale customers – including electric membership corporations

On February 18, 2009, the Public Staff filed a Motion for Clarification seeking clarification of six issues that it stated either have arisen, or appear likely to arise, in connection with these filings. A number of these issues were previously raised in the Commission's Annual Report Regarding Renewable Energy and Energy Efficiency Portfolio Standard dated October 1, 2008 (2008 REPS Report). On February 26, 2009, the Commission issued an Order inviting parties to provide written comments and reply comments on the issues raised by the Public Staff.

On or about March 18, 2009, comments were filed by Duke; PEC; Virginia Electric and Power Company, d/b/a Dominion North Carolina Power (Dominion); ElectriCities of North Carolina, Inc. (ElectriCities); Carolina Utility Customers Association, Inc. (CUCA); North Carolina Sustainable Energy Association (NCSEA); Western Carolina University (WCU); ASU; and the Public Staff.

On March 17, 2009, ASU petitioned to intervene in this proceeding, which was granted by Order issued March 23, 2009. The remaining commenters, with the exception of WCU, had previously been made parties to this docket.

On April 1, 2009, reply comments were filed by Duke, Dominion, NCSEA, and the Public Staff.

#### ISSUES FOR CLARIFICATION

# Hydroelectric power facilities

In its February 18, 2009 Motion, the Public Staff sought clarification on the following three issues regarding hydroelectric power facilities:

- 1. Does G.S. 62-133.8(b)(2)(b) authorize an electric public utility to meet its REPS requirements by generating electric power at a hydroelectric power facility with generation capacity of more than 10 megawatts (MW)?
- 2. Does a hydroelectric generating unit that has a capacity of 10 MW or less, and constitutes a component of a hydroelectric plant with a generation capacity of more than 10 MW, constitute a "new renewable energy facility" within the meaning of G.S. 62-133.8(a)(5)?
- 3. If a hydroelectric plant is owned by an electric power supplier, or a subsidiary affiliate of such supplier, and is connected to the supplier's transmission or distribution system, does the plant "deliver electric power to an electric power supplier" within the meaning of G.S. 62-133.8(a)(5)?

## Positions of the Parties

In its comments on these three issues, the Public Staff argues that an electric power supplier may not claim energy or associated RECs from its own hydroelectric power facilities toward compliance with its REPS requirement. Under G.S. 62-133.8(b)(2)(a) and (c)(2)(a), an electric power supplier may meet all or a portion of its REPS obligation by "[generating] electric power at a new renewable energy facility." Under G.S. 62-133.8(b)(2)(b), an electric public utility may also meet all or a portion of its REPS obligation by "[using] a renewable energy resource to generate electric power at a generating facility other than the generation of electric power from waste heat derived from the combustion of fossil fuel." The Public Staff argues, however, that energy or associated RECs from a hydroelectric power facility owned by an electric power supplier may not be claimed for REPS compliance under any of these provisions.<sup>4</sup>

First, argues the Public Staff, a hydroelectric power facility larger than 10 MW does not satisfy paragraphs (b)(2)(a) or (c)(2)(a) because is not a new renewable energy facility. A renewable energy facility, under G.S. 62-133.8(a)(7), specifically excludes "a hydroelectric power facility with a generation capacity of more than 10 megawatts." Similarly, a new renewable energy facility, under G.S. 62-133.8(a)(5)(c), includes only a renewable energy facility that is "a hydroelectric power facility with a generation capacity of 10 megawatts or less." Thus, the energy generated at a hydroelectric power facility larger than 10 MW may not be claimed for REPS compliance pursuant to G.S. 62-133.8(b)(2)(a) or (c)(2)(a). Although the use of hydropower, defined as a renewable energy resource in G.S. 62-133.8(a)(8), at a "generating facility" would appear to fall within G.S. 62-133.8(b)(2)(b), this interpretation, argues the Public Staff, cannot stand because it is inconsistent with the intent of Senate Bill 3 and renders G.S. 62-133.8(b)(2)(a) unnecessary and superfluous. If all power generated from any renewable energy resource qualifies for REPS compliance, regardless of whether it is generated at a new renewable energy facility or elsewhere, then everything that qualifies under paragraph (b)(2)(a) also qualifies under paragraph (b)(2)(b), and paragraph (b)(2)(a) is mere surplusage. The Public Staff asserts that the history and purposes of Senate Bill 3 furnishes a guide to the correct interpretation of paragraph (b)(2)(b). One of the most important objectives of the statute is to promote the development of renewable energy. Allowing REPS credit for "new" renewable energy effectively promotes the four statutory purposes listed in G.S. 62-2(a)(10) by offsetting the use of coal or natural gas-fueled generation. However, allowing credit for power generated at existing large hydroelectric power facilities merely preserves the status quo. In the Public Staff's view, paragraph (b)(2)(b) was added to the statute to encourage co-firing - that is, the burning of a limited amount of biomass at an existing generating facility that uses coal, natural gas or oil as its primary fuel source. Unlike the generation of power at existing large hydroelectric power facilities, co-firing does not simply maintain the status quo, but provides a new method of using fuel from renewable

<sup>&</sup>lt;sup>4</sup> Under G.S. 62-133.8(c)(2)(c), electric membership corporations and municipalities, in meeting their REPS requirements, may "[p]urchase 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."

sources and reduces the use of fossil fuel. The Public Staff argues that the General Assembly carefully and intentionally drew a distinction in G.S. 62-133.8(a)(5) and (7) between hydroelectric power facilities with a capacity greater than 10 MW and smaller hydroelectric power facilities. The Public Staff urges the Commission not to subvert this legislative distinction by allowing REPS credit for both large and small hydroelectric power facilities. Moreover, while allowing electric public utilities to receive REPS credit for power generated at their existing large hydroelectric power facilities will likely reduce their cost of REPS compliance and minimize the likelihood that they will reach the per-account cost cap imposed by G.S. 62-133.8(h), doing so will not result in any additional renewable energy, or any improvement in air quality, for the people of the State. While the Public Staff agrees with the importance of minimizing the cost of REPS compliance, it does not believe that this is the right way to do it. More importantly, it is not what the General Assembly intended by enacting the REPS statute. The Public Staff, therefore, recommends that the Commission not interpret G.S. 62-133.8(b)(2)(b) to allow electric public utilities to meet their REPS requirements by generating power at large hydroelectric power facilities.

Second, not only are Duke and PEC not entitled to REPS credit for all of their hydroelectric generation under G.S. 62-133.8(b)(2)(b), they should not receive REPS credit under G.S. 62-133.8(b)(2)(a) for power generated either by an individual hydroelectric generating unit of 10 MW or less or at a small hydroelectric power facility whose total capacity is 10 MW or less. To qualify for REPS credit under G.S. 62-133.8(b)(2)(a) or (c)(2)(a), an electric power supplier must generate power from a "new renewable energy facility." The Public Staff argues that an individual turbine, or generating unit, that comprises part of a larger hydroelectric power facility is not a new renewable energy facility for which REPS credit may be claimed under G.S. 62-133.8(b)(2)(a) or (c)(2)(a), even if the generation capacity of that single unit is 10 MW or less. The Public Staff states that, in considering whether to accept registration of Duke's small hydropower units, the critical question is whether each individual generating unit at a multi-unit hydroelectric plant constitutes a separate "hydroelectric power facility," or whether the "facility" is the entire plant. 5 The Public Staff argues that the term "facility" refers to the entire hydroelectric generating plant, including not only the generating units, but all other ancillary components that are required to support the generating units and the transfer of generated power to the grid. The Public Staff argues that, in most technical contexts, the term "facility" is used to refer to an entire electric generating plant (whether hydroelectric, fossil-fired or nuclear) and not to each generating unit within the plant. For example, the United States Department of Energy, Energy Information Administration, defines "facility" as follows:

\_

<sup>&</sup>lt;sup>5</sup> In filing registration statements under Commission Rule R8-66 for all of its hydroelectric generating units with a capacity of 10 MW or less, including individual generating units that are components of a larger plant with a total capacity in excess of 10 MW, Duke asserts that each individual generating unit is a separate "hydroelectric power facility" and a "new renewable energy facility" under G.S. 62-133.8(a)(5). In filing its registration statements, Duke projects that it will generate 384,000 MWh of electric power annually in years with average rainfall from these 30 small hydropower generating units. This renewable energy resource represents approximately 0.68% of its North Carolina retail sales of electricity.

An existing or planned location or site at which prime movers, electric generators, and/or equipment for converting mechanical, chemical, and/or nuclear energy into electric energy are situated or will be situated. A facility may contain more than one generator of either the same or different prime mover type. [Emphasis added.]

Similarly, in ordinary non-technical English, one would normally refer to a multi-unit plant, such as Cowans Ford or Walters, as a hydroelectric power facility, rather than a set of facilities or a group of facilities. The Public Staff does not believe that the General Assembly intended for a plant such as Duke's Rhodhiss Hydro Station, which has a total capacity of 30 MW, but is divided into three generating units, to qualify for REPS credit. Consequently, the Public Staff recommends that Commission conclude that a hydroelectric generating unit that has a capacity of 10 MW or less that is part of a multi-unit plant with a generation capacity of more than 10 MW is not a new renewable energy facility.

Lastly, the Public Staff argues that a hydroelectric power facility with a total generation capacity of 10 MW or less owned by an electric power supplier is not a new renewable energy facility. Under G.S. 62-133.8(a)(5)(c), a facility that was in existence on January 1, 2007, and that did not have a contract with NC GreenPower Corporation can be considered a new renewable energy facility only if it is "a hydroelectric power facility with a generation capacity of 10 megawatts or less that delivers electric power to an electric power supplier." (Emphasis added.) The Public Staff argues that the term "deliver" generally refers to the act of one person or business in bringing or transporting something to another person or business. One does not ordinarily deliver something to oneself, and an electric public utility does not "deliver electric power to an electric power supplier" by generating power for itself on its own system. The Public Staff asserts that this interpretation of the term "deliver" is supported by the history and purposes of Senate Bill 3. The REPS was designed to promote the development of new renewable energy facilities, and, accordingly, the statute provides that electric power suppliers should include in their generation mix a specified percentage of power generated at renewable energy facilities placed into service after January 1, 2007. If the owners of the State's small hydroelectric power facilities go out of business, however, the result will be a reduction, rather than an increase, in the State's renewable energy generation. Because of this concern, the legislature made an exception in G.S. 62-133.8(a)(5)(c) to treat existing small, independently-owned hydroelectric plants as new. While this special treatment of small, independently-owned hydroelectric facilities was justified in order to maintain their viability, it would not be appropriate - and the General Assembly did not intend - to extend this special exception to utility-owned hydroelectric power facilities, even small ones. Allowing power generated at a utility-owned hydroelectric power facility to be considered as having been produced by a "new" facility will neither promote the growth of renewable power nor avoid the loss of renewable facilities. Again, if utilities are allowed to use their existing hydroelectric generation for REPS compliance. this serves only to lower the bar for REPS compliance and reduce the amount of new renewable energy electric power suppliers must obtain. It does not serve to reduce

greenhouse gas emissions, improve air quality, or accomplish any of the other purposes of Senate Bill 3.

Duke, PEC, Dominion, and ElectriCities argue, on the other hand, that all hydroelectric generation may be claimed for REPS compliance pursuant to G.S. 62-133.8(b) and (c). Duke asserts that, if the Commission were to permit the use of all of its hydropower resources, the initial net effect would be to permit the use of the lowest cost renewable – hydropower – to meet the 3% REPS requirement in 2012. The use of hydropower resources to meet a portion of the general REPS requirements enables the electric power suppliers to secure additional renewable energy resources within the REPS per-account cost cap. To decide this issue to exclude these resources will likely result in Duke reaching the cost caps before achieving the renewable energy requirements of Senate Bill 3. Additionally, if utility-owned hydropower qualifies as renewable energy resources, Duke would have the incentive to re-evaluate the potential development or construction of hydropower units that are greater than 10 MW at existing stations and at new locations.

Given the plain language of G.S. 62-133.8(b)(2)(b). Duke and PEC included in their 2008 REPS compliance plans all of their conventional hydropower resources (including those less than and those greater than 10 MW in generating capacity) to meet their REPS compliance requirements. First, although it appears that one of the purposes of the language in paragraph (b)(2)(b) was to permit the use of renewable energy resources, such as biomass, as fuel in a conventional generation facility (known as "co-firing"), a literal reading of Senate Bill 3 allows for all hydropower resources to be used as a renewable energy resource towards the general REPS requirements of G.S. 62-133.8(b) and (c). The definition of a renewable energy resource in G.S. 62-133.8(a)(8) includes the use of hydropower – without limitation of the size of the generating unit. G.S. 62-133.8(b)(2)(b) provides that an electric public utility may meet its general REPS requirements by using "a renewable energy resource to generate electric power at a generating facility other than the generation of electric power from waste heat derived from the combustion of fossil fuel." Therefore, hydroelectric power is a renewable energy resource and may be used to meet the REPS requirements of Senate Bill 3.

Dominion argues that, by limiting the definitions of renewable energy facility and new renewable energy facility to hydroelectric power facilities of 10 MW or less, the General Assembly demonstrated that it knew how to do so and intentionally omitted such a limitation in G.S. 62-133.8(b)(2)(b). Dominion criticizes the Public Staff's argument that the General Assembly "carefully and intentionally drew a distinction in G.S. 62-133.8(a)(5) and (7)," but was "sloppy and uninformed" when crafting the language of G.S. 62-133.8(b)(2)(b). When words are not ambiguous, statutes are not to be reinterpreted. Harrell v. Bowen, 362 N.C. 142, 145, 655 S.E.2d 350 (2008). The General Assembly is presumed to have acted reasonably and knowledgeably in enacting the legislation and the text contained therein, and to have intended to give full effect to the entire legislation passed. Porsh Builders. Inc. v. City of Winston-Salem, 302 N.C. 550, 556, 276 S.E.2d 443, 447 (1981).

Duke further argues that its hydropower units with a generation capacity of 10 MW or less qualify as new renewable energy facilities under G.S. 62-133.8(a)(5)(c). Duke argues that the definition of a new renewable energy "facility" logically applies to the individual units or components of a larger hydropower station. The definition of a "facility" is not provided in the REPS statute or in the Commission's rules promulgated under Senate Bill 3. Absent any express statutory definition, a reasonable and consistent interpretation of the word "facility" is the use of a single operating unit. Duke notes that, in a private letter ruling applying an analogous statute, the North Carolina Department of Revenue used a simple test to determine whether a large solar power station that consists of multiple subsets of solar panels should be considered to be a single installation or multiple installations. In that matter, the Department determined that each subset of solar panels should be considered to be an individual installation because each such subset of solar panels is configured in such a manner that it is capable of independent operation. Similarly, under the REPS statute, facility should be interpreted to mean an individual turbine that generates electric power from the movement of water. A hydropower station may have multiple facilities or units, but only those units that are 10 MW in generating capacity or less will qualify under the definition of a new renewable energy facility.

Lastly, Duke, PEC, Dominion, and ElectriCities argue that, regardless of the owner, hydroelectric plants that are interconnected to an electric power supplier physically deliver electric power to an electric power supplier and meet the definition of new renewable energy facility. The "delivery" requirement of G.S. 62-133.8(a)(5)(c) simply ensures that hydroelectric power is physically connected to the electric grid through an electric power supplier. If the General Assembly intended to limit the use of utility-owned hydropower assets as a means for compliance with requirements it could have done so clearly and directly by including the words "non-utility" in G.S. 62-133.8(a)(5)(c). Since it did not, the Commission should reject the suggestion that there is a distinction, or even a preference, for non-utility hydroelectric power facilities. Duke asserts that the Public Staff's argument that small hydroelectric producers will go out of business unless its definition of "delivers" is adopted is a red herring. Duke argues that small hydropower producers can, and will, continue to operate within the State by selling their electricity to the electric public utilities and have the opportunity to achieve a market premium (or the value of the RECs) for electricity generated from their facilities.

CUCA argues that an electric public utility should be allowed to meet all or a portion of its REPS requirement with energy generated at a hydroelectric power facility larger than 10 MW if a utility brings a "new" (or previously abandoned) hydroelectric generating unit on-line after January 1, 2007. CUCA likewise believes that an electric public utility should be allowed to claim for REPS compliance the addition of "new" capacity to an existing hydroelectric plant which could not otherwise be used to discharge its REPS requirement. Lastly, CUCA argues that energy generated at a utility-owned hydroelectric power facility is "delivered" pursuant to G.S. 62-133.8(a)(5)(c) if the facility is connected to the electric grid, or transmission system, of an electric power supplier having retail customers in North Carolina.

In its comments, NCSEA argues that an electric public utility should not be allowed to claim energy generated at an existing hydroelectric power facility larger than 10 MW toward REPS compliance, but that a repowered hydroelectric generating unit at a plant that is actually connected to and conveying the electric power it generates to the electric supplier's transmission or distribution system could be claimed for REPS compliance. With regard to existing large hydroelectric power facilities, NCSEA argues that the plain intent of G.S. 62-133.8(b)(2)(b) is to permit electric public utilities to meet their REPS requirements using renewable energy resources at nonrenewable energy generating facilities. For example, that provision would apply in the case of co-firing, such as where an electric public utility uses wood waste as an additional fuel source at a coal-fired electric generating facility. By using wood waste, a renewable energy resource, at the coal-fired electric generating facility, a conventional power generating facility, the energy and RECs derived from the proportion of wood waste in the fuel at that facility would, pursuant to G.S. 62-133.8(b)(2)(b), qualify for REPS compliance. NCSEA recognizes that the term "renewable energy resource" defined in G.S. 62-133.8(a)(8) includes hydropower without any capacity limitation. Although this definition would seem to suggest that G.S. 62-133.8(b)(2)(b) and the REPS requirement could be satisfied by generating electric power at a hydroelectric power facility, regardless of the facility's size, this construction of the statute would be inconsistent and at odds with other parts of Senate Bill 3 and its overall intent. NCSEA asserts that the General Assembly was meticulous in its use of the term hydroelectric power and carefully outlined the role this energy resource played in the REPS compliance scheme. By limiting hydroelectric power in the definitions of "renewable energy facility" and "new renewable energy facility" to a facility with a generation capacity of 10 MW or less, the General Assembly explicitly delineated, by size, the hydroelectric power facilities that had value towards compliance with the REPS and determined that the proper cut-off point was at a capacity of 10 MW or less.

NCSEA further argues that, of the six compliance methods available to electric public utilities in G.S. 62-133.8(b)(2), four use the term "new renewable energy facility" and, thus, exclude hydroelectric power facilities larger than 10 MW. The fifth compliance method, which refers to meeting part of the REPS obligation through reduced energy consumption implementing energy efficiency measures or demand-side management programs, is not relevant to the use of hydroelectric power. Only the sixth method, G.S. 62-133.8(b)(2)(b), includes the use of a "renewable energy resource" to generate electric power at a generating facility, which, as noted above, appears to include hydroelectric power facilities of any size. Common sense dictates, however, that the General Assembly would not place a size restriction (10 MW or less) in four compliance methods only to gut that size restriction in the fifth compliance method. That is, four compliance methods articulate that compliance cannot be achieved using hydroelectric power facilities with a generation capacity of greater than 10 MW. Interpreting the sixth method to allow compliance to be achieved by producing energy at a hydroelectric power facility with a generation capacity larger than 10 MW runs counter to the General Assembly's intent and would render superfluous the first four compliance methods, thus violating long-standing rules of statutory construction that no part of a statute is to be read in a way that renders it or other parts superfluous. NCSEA asserts

that this interpretation of the General Assembly's intent is underscored by the language used in G.S. 62-133.8(c)(2)(c). In that subsection, the General Assembly clearly authorizes an electric membership corporation or municipality to meet its REPS requirement by "purchas[ing] electric power from a renewable energy facility or a hydroelectric power facility." If the General Assembly had intended for electric public utilities to satisfy their REPS requirement by generating power at a hydroelectric power facility with a generation capacity of more than 10 MW, then the General Assembly would have included language comparable to G.S. 62-133.8(c)(2)(c). Absent any NCSEA. obvious conclusion language. arques the that comparable G.S. 62-133.8(b)(2)(b) does not authorize an electric public utility to meet its REPS requirement by generating electric power at a hydroelectric power facility with generation capacity of more than 10 MW.

NCSEA notes that the issue raised by the Public Staff pits "what arguably is the plain language of the statute against underlying uncontroverted legislative intent." Typically, the plain language of a statute is considered to embody legislative intent, and, unless there is some ambiguity, there is no reason to look behind that language to determine such intent. In rare instances, argues NCSEA, that is not the case, and in even rarer circumstances, a literal reading of the statute would result in an interpretation that is inconsistent with the General Assembly's manifest purposes. In the latter case, the plain language of the statute will be disregarded or read in a manner that carries out the General Assembly's intent. In the Matter of T.R.M., 656 S.E.2d 626, 630-31 (N.C. App. 2008). NCSEA argues that

the critical phrase in G.S. 133.8(b)(2)(b) for this debate is "generating facility": that is, the qualifying electric power and RECs are produced by using a "renewable energy resource [hydropower, wood waste, spent pulping liquors etc.] to generate electric power at a generating facility." The law does not define a "generating facility" but what is indelibly clear from the statute as a whole, the General Assembly did not have large hydroelectric power facilities in mind when it used that term. [Additions in original.]

With regard to the second issue raised by the Public Staff, whether a hydroelectric generating unit of 10 MW or less that is a component of a larger plant with an overall capacity greater than 10 MW constitutes a "new renewable energy facility" within the meaning of G.S. 62-133.8(a)(5)(c), NCSEA asserts that a generating unit constitutes a "facility" if it is capable of standing alone, capable of being operated alone, and is not dependent on other components or features from other units to generate electric power. It is "new" if it is built and placed into service after January 1, 2007, or if it was idle prior to January 1, 2007, but "repowered" after January 1, 2007.

## Discussion and conclusions

As the utilities stress, a literal reading of Senate Bill 3 would allow all hydroelectric generation resources, regardless of size, age or ownership, to be used

toward REPS compliance. The Public Staff, on the other hand, engages in an elaborate analysis of the law to support a reading that prohibits the use of any utility-owned hydroelectric generation resource, regardless of size or age, for REPS compliance, Other parties suggest interpretations that would authorize results somewhere between the two extremes. The Commission finds merit in each of the suggested statutory interpretations and further finds that so many differing interpretations support the conclusion that the legislation is not free from ambiguity. Because efforts to fully harmonize each of the individual sections and subsections is not possible, the Commission concludes that it must exercise its discretion to interpret the statute in the public interest in order to resolve the conflicts among the parties' interpretations. The Commission, therefore, must determine whether and under what circumstances any utility-owned hydroelectric generation resources can be used to meet a utility's REPS compliance obligation. The Commission will do so by relying on its determination of the overriding legislative intent of Senate Bill 3. The Commission finds and concludes that the overriding policy goal of Senate Bill 3, relative to hydroelectric power, as supported by a reading of the law in its entirety, is to encourage the development of additional small increments of hydroelectric generation capacity. While limited exception exists in Senate Bill 3 for certain existing small hydroelectric generation resources, the Commission concludes that this exception was made for the benefit of small non-utility owned hydroelectric generators, not for the State's major electric utilities. Therefore, the Commission concludes that existing (placed into service prior to January 1, 2007) utilityowned hydroelectric generation cannot be used for REPS compliance, regardless of the size of a unit or the facility of which it is a part, but that power generated from new (placed into service on or after January 1, 2007) small (10 MW or less) increments of utility-owned hydroelectric generation may be used by an electric public utility for REPS compliance.

First, with regard to hydroelectric power facilities larger than 10 MW, the Commission is persuaded by the arguments of NCSEA and the Public Staff that G.S. 62-133.8(b)(2)(b) should not be read so as to render paragraph (b)(2)(a) as mere surplusage. Porsh Builders, 302 N.C. at 556 ("It is presumed that the legislature intended each portion to be given full effect and did not intend any provision to be mere surplusage"); Mazda Motors of Am., Inc. v. Southwestern, Motors, Inc., 296 N.C. 357, 361, 250 S.E.2d 250, 253 (1979) ("The intent of the legislature controls the interpretation of a statute. ... '[W]here a literal interpretation of the language of a statute will lead to absurd results, or contravene the manifest purpose of the Legislature, as otherwise expressed, the reason and purpose of the law shall control and the strict letter thereof shall be disregarded.") (quoting State v. Barksdale, 181 N.C. 621, 107 S.E. 505(1921)); In re Hardy, 294 N.C. 90, 95-96, 240 S.E.2d 367 (1978) ("In construing the language of statutes we are guided by the primary rule of construction that the intent of the Legislature controls. ... Words and phrases of a statute may not be interpreted out of context, but individual expressions 'must be construed as a part of the complete whole and must be accorded only that meaning which other modifying provisions and the clear intent and purpose of the act will permit."") (quoting Watson Indus. v. Shaw, 235 N.C. 203, 210, 69 S.E.2d 505, 511 (1952)). To allow generation at existing large hydroelectric power facilities to be claimed for REPS compliance under paragraph

(b)(2)(b) would negate the language of paragraphs (a)(5) and (a)(7) which specifically exclude hydroelectric power facilities with a generation capacity of more than 10 MW. Clearly, the legislature did not intend to allow that which it had otherwise specifically excluded.

Second, with regard to existing hydroelectric power facilities with generation capacity of 10 MW or less, the Commission agrees with the Public Staff that the "delivery" requirement of G.S. 62-133.8(a)(5)(c) excludes such facilities from the definition of new renewable energy facility. As stated in both the title of the act and the amended declaration of policy, G.S. 62-2(a)(10), Senate Bill 3 was enacted to promote the <u>development</u> of renewable energy, <u>i.e.</u>, new renewable energy. The exceptions to the definition of "new renewable energy facility" do not promote the <u>development</u> of renewable energy, but merely maintain the status quo, and must be narrowly construed. Good Hope Hosp., Inc. v. North Carolina Dep't of Health & Human Servs., 175 N.C. App. 309, 312, 623 S.E.2d 315, <u>aff'd</u>, 360 N.C. 641, 636 S.E.2d 564 (2006). Paragraphs (a)(5)(b) and (a)(5)(c), which use similar language, both contemplate the delivery of electric power to an electric power supplier.

Lastly, with regard to small hydroelectric generating units, the Commission concludes that individual generating units that are components of a larger hydroelectric generating plant are not individual renewable energy facilities. Rather, as argued by the Public Staff, the term "facility" refers to the entire generating plant. Although the term "facility" is not defined in Senate Bill 3, it is used elsewhere in the Public Utilities Act. For example, pursuant to G.S. 62-110.1(a), "no public utility or other person shall begin the construction of any steam, water, or other facility for the generation of electricity" without first obtaining from the Commission a certificate of public convenience and necessity. (Emphasis added.) Under G.S. 62-110.1(g), this certification requirement "shall not apply to a nonutility-owned generating facility fueled by renewable energy resources under two megawatts in capacity .... " (Emphasis added.) If an individual generating unit at a hydroelectric power plant is considered to be a facility, then an individual wind turbine at a wind farm or an individual array at a solar farm might also be a generating facility. However, the Commission does not believe that a 20 MW wind or solar farm is exempt from the certification requirement as a group of generating facilities, each of which is less than 2 MW. Such an interpretation could be argued, however, if an individual generating unit at a larger hydroelectric generating plant were held to be a "facility" for purposes of G.S. 62-133.8.

Nevertheless, the Commission determines that the underlying intent of Senate Bill 3 is not best served by prohibiting REPS compliance and cost recovery for post-January 1, 2007, hydroelectric generation additions of 10 MW or less by a strict reliance on a narrow reading of the statute. Compliance with the REPS standard without first reaching the per-account cost caps will prove difficult, and the Commission determines that it should not make a difficult task even more onerous by disregarding an emission-free, no-fuel-cost resource with a lower cost than many other renewable options simply because the electric utility owns and develops it. Therefore, based on a consideration of

the overriding policy objectives of Senate Bill 3, the Commission finds that increments of additional hydroelectric power capacity of 10 MW or less placed into service on or after January 1, 2007, either as an expansion or repowering of an existing hydroelectric power facility or the construction of a new facility, shall be considered to be a new renewable energy facility under G.S. 62-133.8(a)(5)(a) to the extent of the incremental generation capacity. Such an interpretation is consistent with the intent of Senate Bill 3 to encourage the development of renewable energy. It would be unreasonable to adopt unnecessary barriers to the expansion of current hydroelectric power facilities or the development of new small hydroelectric power facilities. The Commission, therefore, will consider incremental generation capacity created at a new or existing hydroelectric power facility to be a "new renewable energy facility" where the new increment of capacity is 10 MW or less. If the incremental generation capacity is added to an existing hydroelectric power facility, the electric public utility shall allocate the power generated on a pro rata basis to determine the amount of power generated by the incremental capacity and used for REPS compliance.

It is not clear to the Commission that the General Assembly anticipated and clearly and cogently addressed the contingency in which an electric utility adds new or incremental hydroelectric generation capacity after January 1, 2007. In view of the underlying purposes of Senate Bill 3, the Commission cannot identify a persuasive justification that might result in disallowances of utility-owned new hydroelectric generation capacity of 10 MW or less. If such a justification exists, the General Assembly is free to modify the provisions of Senate Bill 3 and rectify the result reached herein.

In reaching this result, the Commission stresses that its conclusions are strictly limited to post-January 1, 2007, utility-owned hydroelectric generation because Senate Bill 3 does not explicitly address such generation additions. Nothing in this ruling should be used to support arguments addressing other types of renewable resources or facilities or registration statements therefor. Additionally, the Commission has not attempted to anticipate each variation of utility-owned, post-January 1, 2007, incremental hydroelectric generation capacity addition, and will address disputes with respect thereto, if any, on a case-by-case basis.

#### Tennessee Valley Authority

In its February 18, 2009 Motion, the Public Staff further sought clarification on the following issue regarding wholesale purchasers from TVA:

4. If an electric power supplier receives or purchases power from the Tennessee Valley Authority under a full-requirements contract or otherwise, is such supplier exempt from the requirements of G.S. 62-133.8?

## Positions of the Parties

In its initial comments, the Public Staff states that electric power suppliers that purchase wholesale power from TVA are not exempt from the REPS requirement on the basis of "federal supremacy." The Public Staff notes that there are a number of federal agencies that generate electricity and provide it to suppliers at wholesale, including the Southeastern Power Administration (SEPA) and the Bonneville Power Administration (BPA). The electric cooperatives and municipals in North Carolina that purchase from SEPA have never contended that such purchases exempt them from REPS compliance, and the Public Staff states that it is informed that utilities in Washington and Oregon that purchase power from BPA have never claimed exemption for those states' portfolio standards. Neither TVA nor any of the electric power suppliers that purchase from TVA participated and filed comments in this proceeding citing any support for their argument that, simply by purchasing power from a federal agency, an electric power supplier can avoid compliance with the regulatory requirements of the states in which it operates.

ElectriCities similarly argues in its initial comments that there is no language in GS 62-133.8 that explicitly or implicitly exempts an electric power supplier, as that term is defined in the statute, from the REPS requirements. While the terms of a full-requirements contract with TVA may well prohibit the electric power supplier from generating renewable energy or from buying it from another wholesale power provider, the electric power supplier still can comply with the REPS requirement by purchasing RECs and implementing demand-side management and energy efficiency measures.

NCSEA notes in its comments that, while Senate Bill 3 lays out different REPS requirements and authorizes different avenues for compliance for public utilities, EMCs and municipalities, it does not exempt any of the electric power suppliers providing retail electric service in the State from compliance. If an electric power supplier, regardless of where it is headquartered or how it procures its electric power, sells electric power to retail customers in the State, then it must comply with G.S. 62-133.8.

#### Discussion and conclusions

The Commission concludes that G.S. 62-133.8, through its broadly encompassing definition of electric power supplier, is intended to apply to all entities that sell electric power to retail customers in North Carolina. The North Carolina General Assembly has the authority to regulate retail sales to North Carolina consumers by any entity, regardless of where that entity maintains its corporate headquarters or of where that entity obtains the power it sells. No federal supremacy doctrine applies based upon the retail suppliers' purchase of power from a federal entity, such as TVA. Thus, while the North Carolina legislature might be limited in its authority to impose an REPS obligation on TVA because of federal supremacy, TVA's distributors making retail sales in North Carolina, which are not federal entities, are not entitled to make a supremacy clause argument and do not assume the status of TVA simply by purchasing energy at wholesale from TVA or from any other federal entity.

In the letters filed by TVA distributors, they cited TVA's hydroelectric generation and its GreenPower Switch voluntary green power program, as well as various energy efficiency measures, as efforts undertaken comparable to North Carolina's REPS mandate. The Commission concludes that renewable energy marketed through TVA's voluntary green power pricing program may not be claimed for REPS compliance, just as RECs purchased by NC GreenPower are ineligible. Lastly, the Commission will require each TVA distributor that provides retail electric service to customers in North Carolina to comply with Senate Bill 3 and the Commission's rules or be subject to a show cause proceeding.

# Electric Membership Corporations

In its February 18, 2009 Motion, the Public Staff sought clarification on the following issue regarding out-of-state electric membership corporations:

5. If an electric membership corporation provides electric service to customers in North Carolina, but has its headquarters in another state, is it exempt from the requirements of G.S. 62-133.8?

## Positions of the Parties

The Public Staff states in its comments that, as with the TVA distributors, all parties that commented, including NCSEA and ElectriCities, agree that any EMC that serves retail customers in North Carolina must comply with the REPS statute. As stated in G.S. 62-133.8(c)(1), "Each electric membership corporation or municipality that sells power to retail electric power customers in the State shall be subject to" the REPS. The criterion is whether an EMC sells power to retail electric customers in the State, not whether it is headquartered in the State. As ElectriCities states, if an EMC "sells electric power to retail electric power customers in North Carolina," it is, by definition, an "electric power supplier" and must comply with the provisions of G.S. 62-133.8. The Public Staff further argues that, if electric power suppliers with headquarters outside the State were free of any REPS obligation, then Dominion would not be required to comply; however, Dominion has never denied that it is subject to the REPS.

#### Discussion and conclusions

The Commission agrees with the commenters and concludes that EMCs headquartered outside of North Carolina that serve retail electric customers within the State must comply with the REPS requirement. As stated previously, Senate Bill 3 is intended to apply to all retail electric suppliers in North Carolina. It is the sale of power to customers in North Carolina, not the location of a corporate headquarters, that provides the authority of the North Carolina General Assembly to impose an REPS obligation. The Commission further finds it appropriate to require each electric cooperative that provides retail electric service to customers in North Carolina to comply with Senate Bill 3 and the Commission's rules or be subject to a show cause proceeding.

# Western Carolina University and New River Light & Power Company

In its February 18, 2009 Motion, the Public Staff sought clarification on the following issue regarding university-owned utilities:

6. Are Western Carolina University and New River Light & Power Company exempt from the requirements of G.S. 62-133.8?

## Positions of the Parties

In their comments, ASU, WCU, and ElectriCities assert that ASU and WCU are exempt from the REPS requirement of G.S. 62-133.8. Both ASU and WCU are constituent members of the University of North Carolina. G.S. 116-2(4). Both ASU, through its operating unit New River, and WCU operate electric distribution systems and provide retail electric service pursuant to G.S. 116-35. As a part of the University of North Carolina, neither ASU nor WCU are subject to regulation as a public utility. G.S. 62-3(23)(e)<sup>8</sup>; Order Finding No Jurisdiction to Hear and Investigate Complaint, In re Gamble, Docket No. E-35, Sub 18 (N.C.U.C. 1994); Opinion of Attorney General to Mr. Myron L. Coulter, Chancellor, Western Carolina University, 55 N.C.A.G. 55 (1985). The Commission's jurisdiction over ASU and WCU with regard to their electric systems is limited to approval of the rates charged to customers. G.S. 116-35.

ASU, WCU, and ElectriCities note that the REPS requirement of Senate Bill 3 applies only to public utilities, EMCs, and municipalities. Specifically, electric power supplier is defined in G.S. 62-133.8(a)(3) to mean "a public utility, an electric membership corporation, or a municipality that sells electric power to retail electric power customers in the State." Since neither ASU nor WCU is a public utility, an EMC, or a municipality, neither is subject to the REPS requirement of Senate Bill 3.

<sup>&</sup>lt;sup>6</sup> G.S. 116-2(4) defines a "constituent institution" or "institution" of the University of North Carolina as one of the sixteen public institutions of higher education, to wit, the University of North Carolina at Chapel Hill, North Carolina State University at Raleigh, the University of North Carolina at Greensboro, the University of North Carolina at Chapel Hill, North Carolina at Charlotte, the University of North Carolina at Asheville, the University of North Carolina at Wilmington, Appalachian State University, East Carolina University, Elizabeth City State University, Fayetteville State University, North Carolina Agricultural and Technical State University, North Carolina Central University, North Carolina School of the Arts (redesignated effective August 1, 2008, as the University of North Carolina School of the Arts), Pembroke State University (redesignated effective July 1, 1996, as the University of North Carolina at Pembroke), Western Carolina University, and Winston-Salem State University, and the constituent high school, the North Carolina School of Science and Mathematics.

<sup>&</sup>lt;sup>7</sup> Through New River, ASU provides electric service to the university, the Town of Boone, and the surrounding community

<sup>&</sup>lt;sup>5</sup> "The term 'public utility' shall include the University of North Carolina insofar as said University supplies telephone service, electricity or water to the public for compensation from the University Enterprises defined in G.S. 116-41.1(9)." G.S. 62-3(23)(e). University Enterprises, as defined in G.S. 116-41.1(9), includes only certain facilities "located in or near the Town of Chapel Hill, North Carolina" operated by the University, and does not include facilities operated by ASU (New River) or WCU.

In its comments, the Public Staff agrees with WCU, ASU, and ElectriCities that WCU and New River are not subject to the REPS requirement of Senate Bill 3.

NCSEA, however, in its comments, argues that WCU and New River fall within the definition of public utility. Thus, while Senate Bill 3 provides different REPS requirements and authorizes different avenues for compliance for public utilities and for EMCs and municipalities, it does not exempt any of the electric service providers selling electric power to retail customers in the State from compliance. As with the TVA distributors and out-of-state cooperatives, if an electric service provider, regardless of where it is headquartered or how it procures its electric power, sells electric power to retail customers in the State, then it must comply with the REPS.

#### Discussion and conclusions

The Commission concludes that WCU and New River are not subject to the REPS requirement of Senate Bill 3. Although Senate Bill 3 was intended to apply to all retail electric suppliers in North Carolina, a fair reading of the statute limits its applicability to public utilities, EMCs, and municipalities. The Commission has previously and consistently held that WCU is not a public utility; the same decision should apply to ASU and New River. Although they might be willing to comply with the REPS requirement applicable to municipalities, neither ASU nor WCU can be held to be an EMC or a municipality. The Commission, nonetheless, recognizes that WCU and ASU are actively pursuing renewable energy projects and energy efficiency measures and encourages WCU and New River to voluntarily comply with the REPS requirement of Senate Bill 3 in the same manner as other electric power suppliers.

IT IS, THEREFORE, SO ORDERED.

ISSUED BY ORDER OF THE COMMISSION.

This the 17<sup>th</sup> day of June, 2009.

NORTH CAROLINA UTILITIES COMMISSION

Hail L. Mount

Gail L. Mount, Deputy Clerk

Commissioner Susan W. Rabon did not participate in this decision.

Kc051909.01

# STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. E-100, SUB 113

#### BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of	
Rulemaking Proceeding to Implement	) ORDER ON JOINT
Session Law 2007-397	) MOTION TO DETERMINE
	) WHETHER RECS ARE
	) IN-STATE OR OUT-OF-STATE

BY THE COMMISSION: On February 29, 2008, and March 13, 2008, the Commission issued Orders in the above-captioned docket adopting rules to implement Session Law 2007-397 (Senate Bill 3) and the Renewable Energy and Energy Efficiency Portfolio Standard (REPS) in North Carolina.

On May 13, 2009, Progress Energy Carolinas, Inc. (PEC), and Peregrine Biomass Development Company, LLC (Peregrine), filed a Joint Motion in this docket requesting that the Commission declare that all renewable energy certificates (RECs) earned by Peregrine's biomass-fueled combined heat and power facility located in PEC's South Carolina service territory, including RECs associated with both the electric power and useful thermal energy produced by the facility, be considered in-State for REPS compliance and not be subject to the 25% out-of-state REC limit contained in G.S. 62-133.8(b)(2)(e). By Order dated May 22, 2009, the Commission requested that parties comment on the issue raised in the Joint Motion.

The Joint Motion states that Peregrine's planned facility will be built on the premises of Sonoco Products near Hartsville, South Carolina, and states further:

The facility will generate two forms of useful energy from the same power cycle, electricity and low pressure steam. The electricity will be sold to PEC and the low pressure steam will be sold to Sonoco. The Peregrine combined heat and power facility will be located in PEC's assigned territory in South Carolina and will be directly interconnected with PEC's electric system. Pursuant to a single integrated contract PEC will purchase 100% of: the electricity generated by the facility; the RECs associated with the electricity sold; and the thermal RECs associated with the low pressure steam sold to Sonoco.

PEC and Peregrine argue that the Peregrine facility will simultaneously produce both electric power and thermal energy, and, therefore, both electric and thermal RECs. They assert that the RECs associated with the electric power produced by the facility are "clearly considered in-state." Given that the thermal RECs are produced by the same facility and will be bundled and purchased via the same contract between PEC and Peregrine, they, too, should be classified as in-State RECs. The companies argue

that to do otherwise would produce a nonsensical, absurd result, <u>i.e.</u>, the very same cogeneration facility would produce both in-State and out-of-state RECs. The companies assert that their fact situation differs from that directly addressed in the Commission's May 7 and 8, 2009 Orders in this docket:<sup>1</sup>

in those instances [the RECs] were not bundled and the utility was not purchasing any electricity from the generating facility. This is not the case with the Peregrine facility. PEC will be purchasing all of the electricity generated by the facility and all of the RECs generated will be delivered to and purchased (bundled) by PEC.

On May 22, 2009, and June 8, 2009, Duke Energy Carolinas, LLC (Duke), and Virginia Electric and Power Company, d/b/a Dominion North Carolina Power (Dominion), filed letters in support of the Joint Motion. On June 10, 2009, the Public Staff filed comments in support of the Joint Motion, stating simply that "thermal energy produced by an out-of-state renewable energy facility should qualify as in-State if it is produced within the service territory of a North Carolina utility."

On June 10, 2009, the North Carolina Sustainable Energy Association (NCSEA) filed comments disagreeing with the utilities and the Public Staff and asserting that the Commission has misinterpreted Senate Bill 3 by allowing any RECs from a facility that is located geographically outside of North Carolina to be exempt from the 25% limit. Citing the Commission's decision that electric power produced at a new renewable energy facility located outside the geographic boundaries of the State is considered as in-State so long as the energy is delivered to a utility that provides electric power to retail customers in North Carolina, NCSEA argues:

This ruling essentially eliminated the distinction between in-state RECs and out-of-state RECs. This interpretation is not mandated, however. G.S. 62-133.8(b)(2)(d) says RECs produced at an out-of-state facility can be counted towards compliance if the electricity is sold to a utility with retail customers in North Carolina. It does not say that such RECs are considered "in-State RECs" nor does it say that the RECs are not subject to the 25% cap in 133.8(b)(2)(e) .... Rather, G.S. 62-133.8(b)(2)(d) says that RECs associated with energy sold to a utility selling to retail customers in North Carolina can be used for compliance, subject to the 25% cap. After considering other parties' comments, the Commission's May 7, 2009 Order, and the Motion at hand, NCSEA is firmly of the opinion that the General Assembly's intent was to define an out-of-state facility as any facility that is located outside of the geographic boundaries of North Carolina. ... [B]ecause the proposed Peregrine facility will be located in South Carolina, the associated electrical energy, thermal energy, and all associated RECs should be considered out-of-state and subject to the 25% limitation for REPS compliance.

<sup>&</sup>lt;sup>1</sup> On May 7 and 8, 2009, the Commission issued Orders in this docket in which it addressed a Motion for Clarification filed by Duke, including issues regarding the in-State status of thermal RECs earned by a facility located outside of North Carolina.

#### Discussion and conclusions

There is no dispute that the RECs associated with both the electric power and the useful thermal energy produced by Peregrine's South Carolina facility, a new renewable energy facility pursuant to G.S. 62-133.8(a)(5),<sup>2</sup> are eligible to be used by a North Carolina electric public utility to meet its REPS obligation under Senate Bill 3. The issue is whether any of those RECs are subject to the 25% out-of-state REC limit. The specific question before the Commission, therefore, is whether the non-electric RECs earned by an out-of-state facility should be considered as in-State RECs where the facility is in the service territory of a North Carolina electric public utility that is purchasing the facility's electric power, associated electric RECs, and thermal RECs via one contract.

An electric public utility, <u>e.g.</u>, PEC, may meet the REPS requirements of Senate Bill 3 in a number of ways, as set forth in G.S. 62-133,8(b)(2), including the following:

- d. 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.
- e. 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....

Under the facts presented here, Peregrine is generating electric power using biomass and is earning RECs associated with that electric power. PEC is purchasing the electric power together with the associated RECs for REPS compliance pursuant to subparagraph (d). Peregrine is also selling and delivering low pressure steam to Sonoco for use at its facility. By capturing the waste heat as useful thermal energy, Peregrine is earning additional RECs that it is also selling to PEC. Because the thermal RECs are in addition to, and separate from, those directly associated with the generation of electric power, they may not be considered as purchased pursuant to subparagraph (d), which is limited to "electric power purchased from a new renewable energy facility," but must be considered for REPS compliance as purchased pursuant to subparagraph (e).

Ordinarily, as argued by the NCSEA, RECs earned by a facility located within the geographic boundaries of the State of North Carolina would be considered as in-State; those earned by a facility located outside of the geographic boundaries of the State of

<sup>&</sup>lt;sup>2</sup> The Commission approved Peregrine's registration application for the facility in Docket No. SP-396, Sub 0, by Order issued April 15, 2009.

North Carolina would be considered as out-of-state. Subparagraph (d) creates an exception to this general rule, however, for RECs associated with electric power purchased from a new renewable energy facility located outside of the geographic boundaries of the State that is delivered to a public utility that provides electric power to retail electric customers in the State. The limitation on out-of-state RECs set forth in subparagraph (e) only applies to RECs purchased pursuant to that provision, including RECs associated with useful thermal energy or RECs associated with electric power that are purchased separately from the associated electric power, and does not apply to RECs associated with electric power purchased pursuant to subparagraph (d). The Commission, therefore, rejects NCSEA's interpretation that all RECs purchased from an out-of-state facility are subject to the out-of-state limitation set forth in subparagraph (e).

The fact situation Peregrine and PEC present is one in which PEC is purchasing the electric power, the RECs directly associated with that electric power, and the RECs directly associated with the useful thermal energy produced at the facility. Based upon the above interpretation, the Commission concludes that subparagraph (d) applies to the electric power and, implicitly, the RECs directly associated with that electric power; subparagraph (e) applies to the RECs directly associated with the useful thermal energy. The thermal RECs earned and sold by Peregrine are eligible to count toward PEC's REPS compliance pursuant to subparagraph (e), but they are also subject to that provision's 25% limitation on out-of-state RECs. The Commission is not persuaded by PEC and Peregrine's argument that the thermal RECs should be considered to be "bundled" with the electric power and associated electric RECs because they are purchased pursuant to a single agreement. Because subparagraph (d) is limited to the purchase of electric power for REPS compliance, it does not apply to the purchase of non-electric RECs.

Based on the Commission's prior interpretation of G.S. 62-133.8(b) and the entire record in this proceeding, the Commission, therefore, denies the Joint Motion.

IT IS, THEREFORE, SO ORDERED.

ISSUED BY ORDER OF THE COMMISSION.

This the 13th day of July, 2009.

NORTH CAROLINA UTILITIES COMMISSION

Patricia Swenson

Patricia Swenson, Deputy Clerk

kj071309.01

Commissioners Robert V. Owens, Jr., and ToNola D. Brown-Bland did not participate in this decision.

# 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 DOMINION'S
Session Law 2007-397	j	SECOND MOTION FOR
	)	RECLARIFICATION

BY THE COMMISSION: On February 29, 2008, and March 13, 2008, the Commission issued Orders in this docket adopting rules to implement Session Law 2007-397 (Senate Bill 3) and the Renewable Energy and Energy Efficiency Portfolio Standard (REPS) in North Carolina. On May 7 and 8, June 17, and July 13, 2009, the Commission issued Orders further interpreting Senate Bill 3 and addressing issues raised by Duke Energy Carolinas, LLC (Duke), Progress Energy Carolinas, Inc. (PEC), Peregrine Biomass Development Company, LLC (Peregrine), and the Public Staff.

On June 12, 2009, Dominion North Carolina Power (Dominion) filed a Motion for Further Clarification in response to the Commission's determinations on questions raised by Duke related to the use of renewable energy certificates (RECs) to meet the REPS set-aside requirements. On July 1, 2009, the Commission issued an Order allowing parties an opportunity to file written comments on the issues raised by Dominion and whether the 25% limit on out-of-state RECs in G.S. 62-133.8(b)(2)(e) and (c)(2)(d) should apply to both the general REPS obligation and to the specific set-aside provisions in G.S. 62-133.8(d), (e) and (f).

On July 9, 2009, Dominion filed a Second Motion for Reclarification in response to the Commission's June 17, 2009 Order on Public Staff's Motion for Clarification. Specifically, Dominion seeks further clarification with regard to the following issue raised by the Public Staff in its February 18, 2009 Motion for Clarification:

1. Does G.S. 62-133.8(b)(2)(b) authorize an electric public utility to meet its REPS requirements by generating electric power at a hydroelectric power facility with generation capacity of more than 10 megawatts (MW)?

Dominion notes that the Commission determined, based on its conclusion that the legislative intent "was, at least relative to hydroelectric power, to encourage the development of additional small increments of hydroelectric generation capacity," that existing utility-owned hydroelectric generation cannot be used for REPS compliance, but that power generated from new, small increments of utility-owned hydroelectric

generation may be used for REPS compliance. Dominion notes that the Commission further stated in its Order:

In reaching this result, the Commission stresses that its conclusions are strictly limited to post-January 1, 2007, utility-owned hydroelectric generation because Senate Bill 3 does not explicitly address such generation additions. Nothing in this ruling should be used to support arguments addressing other types of renewable resources or facilities or registration statements therefor.

Dominion seeks further clarification regarding whether, pursuant to G.S. 62-133.8(b)(2)(b), it may use electric power produced at existing utility-owned renewable generation facilities or purchase power produced at existing non-utility-owned renewable generation facilities (NUGs) to satisfy its REPS requirements.

With regard to its own existing generation resources, Dominion reiterates the arguments that it, Duke, and PEC made in response to the Public Staff's Motion that, "under a plain reading of the law [G.S. 62-133.8(b)(2)(b)], utilities, such as [Dominion], are permitted [to] meet their general REPS requirements with renewable energy resources, regardless of whether the facility is 'new' or built prior to January 1, 2007 and regardless of whether the utility or a NUG owns it." In its June 17, 2009 Order, the Commission stated that it:

is persuaded by the arguments of NCSEA and the Public Staff that G.S. 62-133.8(b)(2)(b) should not be read so as to render paragraph (b)(2)(a) as mere surplusage. ... To allow generation at existing large hydroelectric power facilities to be claimed for REPS compliance under paragraph (b)(2)(b) would negate the language of paragraphs (a)(5) and (a)(7) which specifically exclude hydroelectric power facilities with a generation capacity of more than 10 MW. Clearly, the legislature did not intend to allow that which it had otherwise specifically excluded.

Because the Commission clearly addressed the issue raised by the Public Staff regarding utility-owned hydroelectric power facilities, it assumes Dominion is further asking in its Second Motion about the use of a renewable energy resource other than hydropower to generate power at an existing utility-owned generating facility.

The Commission concludes that the same reasoning as previously applied to hydropower is applicable to the use of any renewable energy resource at an existing utility-owned generating facility. In addition to reducing energy consumption through the implementation of an energy efficiency measure, an electric public utility may meet the REPS requirements of Senate Bill 3 by generating electric power at a renewable energy facility, purchasing power from a new renewable energy facility, purchasing renewable energy certificates from a new renewable energy facility, or using a renewable energy resource to generate electric power at a generating facility other than the generation of electric power from waste heat derived from the combustion of fossil fuel. In each of the first

three instances involving the generation of electric power, the electric power must be generated at a new renewable energy facility. For a non-hydroelectric power facility, a "new" renewable energy facility must be one that was placed into service on or after January 1, 2007, or that had a contract with NC GreenPower prior to January 1, 2007. Since the NC GreenPower exception does not apply to utility-owned generation, a utilityowned renewable energy facility placed into service prior to January 1, 2007, does not meet the definition of "new" renewable energy facility. As the Commission previously determined with respect to hydropower, it will not read paragraph (b)(2)(b) to negate the remaining provisions of subdivision (b)(2) and allow that which the legislature clearly otherwise excluded. If the legislature had intended to allow the use of any renewable energy resource at an existing utility-owned generating facility for REPS compliance, it would not have limited electric utilities in paragraph (b)(2)(a) to generating electric power only at a new renewable energy facility. The Commission reads paragraph (b)(2)(b) to allow an electric public utility to comply with the REPS standard by co-firing biomass or another renewable energy resource at a utility-owned generating facility that otherwise primarily uses fossil fuels. The Commission notes the use of the term "generating facility," rather than "renewable energy facility," in paragraph (b)(2)(b) in reaching this conclusion.

Moreover, La Capra Associates found, in its December 2006 study of the potential costs and benefits of a renewable portfolio standard in North Carolina, that North Carolina had at that time over 2,000 MW of renewable generation capable of providing 4% to 5% of the State's energy needs. With that information before it, the Commission believes that the General Assembly would not have adopted a 3% REPS standard beginning in 2012 if it had intended for utilities to use electric power generated at existing utility-owned renewable energy facilities for REPS compliance.

With regard to purchases from non-utility-owned generation, Dominion argues:

Section 62-133.8(b)(2)(b) does not make a distinction between the use of renewable energy sources used at a utility owned generating facility or a NUG. Therefore, each of the arguments in support of the Company using its own existing generating facilities that use renewable energy resources are asserted here for allowing the Company to apply renewable energy purchased from existing NUGs to meet its REPS requirements.

The Commission concludes, however, that paragraph (b)(2)(b) does not apply to purchases of electric power from non-utility-owned renewable generation. An electric public utility is limited pursuant to G.S. 62-133.8(b)(2) to purchasing electric power or RECs from a new renewable energy facility for REPS compliance. The first word of each paragraph in subdivision (b)(2) refers to actions by an electric public utility — "generate," "use," "reduce," "purchase" — and not to actions by third parties. Therefore, unless it had a contract with NC GreenPower prior to January 1, 2007, a non-utility-owned renewable energy facility must have been placed into service on or after January 1, 2007, in order to be considered a

"new" renewable energy facility and eligible to sell electric power or RECs to an electric public utility for REPS compliance.

IT IS, THEREFORE, SO ORDERED.

ISSUED BY ORDER OF THE COMMISSION.

This the 27<sup>th</sup> day of July, 2009.

NORTH CAROLINA UTILITIES COMMISSION

Hail L. Mount

Gail L. Mount, Deputy Clerk

Sw072709.01

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

# 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 DOMINION'S
Session Law 2007-397	)	MOTION FOR FURTHER
	)	CLARIFICATION

BY THE COMMISSION: On February 29, 2008, and March 13, 2008, the Commission issued Orders in this docket adopting rules to implement Session Law 2007-397 (Senate Bill 3) and the Renewable Energy and Energy Efficiency Portfolio Standard (REPS) in North Carolina. On or about September 2, 2008, the electric power suppliers began filing their initial REPS compliance plans pursuant to Commission Rule R8-67(b).

On November 3, 2008, Duke Energy Carolinas, LLC (Duke), filed a Motion for Clarification with regard to eleven issues concerning the interpretation of Senate Bill 3 to assist in its REPs compliance planning. On November 13, 2008, the Commission issued an Order inviting parties to provide written comments and reply comments on the issues raised by Duke. On May 7 and 8, 2009, the Commission issued orders on Duke's Motion for Clarification.

On June 12, 2009, Dominion North Carolina Power (Dominion) filed a Motion for Further Clarification in response to the Commission's determinations on questions related to the use of renewable energy certificates (RECs) to meet the REPS set-aside requirements. Specifically, Dominion sought further clarification with regard to the following issue raised by Duke in its Motion:

6. Whether an electric power supplier may satisfy the specific carveout requirements (e.g., solar, swine and poultry) through the purchase of
unbundled RECs from either in-state or out-of-state renewable energy
facilities? If out-of-state RECs can be used to meet the carve-out
requirements, could an electric power supplier meet 100% of these carveout requirements with out-of-state RECs, provided that doing so would
entail utilizing out-of-state RECs for no more than 25% of its overall
renewable energy requirement (or, would the 25% out-of-state limit be
applied to each individual carve-out requirement)?

In its Motion, Dominion notes that the Commission determined, based on its conclusion that the legislation's intent is to support "energy resources and issues indigenous to North Carolina," that, in order to meet the set-aside requirements, "the energy associated with the RECs acquired to satisfy the set-aside requirements must

be generated or delivered to an electric power supplier." Dominion states that, in reaching this determination, the Commission did not specifically address Dominion's position and special status under Senate Bill 3 and misinterpreted the term "section" with regard to whether the out-of-state limit applies to the set-aside requirements. Dominion, therefore, requests that the Commission further clarify, as Dominion previously argued in response to Duke's Motion and as was supported by the Public Staff, that "it is permitted by statute to satisfy 100% of the carve-out requirements and the overall REPS requirements with the purchase of out-of-state RECs from anywhere in the lower 48 states."

On July 1, 2009, the Commission issued an Order allowing parties the opportunity to comment on the issues raised in Dominion's Motion. In its Order, the Commission further gave notice, pursuant to G.S. 62-80, that, in response to Dominion's Motion and the arguments set forth therein, it would reconsider its reasoning and the following conclusions in the May 7, 2009 Order regarding the above issue raised by Duke in its Motion, the interpretation of the term "section," and whether the 25% limit on out-of-state RECs in G.S. 62-133.8(b)(2)(e) and (c)(2)(d) should apply to both the general REPS obligation and to the specific set-aside provisions in G.S. 62-133.8(d), (e) and (f):

Subsections (d), (e), and (f) each state that a certain amount "of the total electric power in kilowatt hours sold to retail electric customers in the State shall be supplied by the set-aside resource. Several parties assert that the phrase "kilowatt hours sold" simply establishes the amount of each set-aside requirement, and that the amount of energy thus calculated must be "supplied" by the particular set-aside resource. NCSEA argues that the General Assembly intended that the energy "supplied by" the particular set-aside resource must actually be "sold to retail electric customers in the State." ... Thus, while the 25% limitation applies only to the general REPS requirement and not to the specific set-aside requirements, the energy associated with the RECs acquired to satisfy the set-aside requirements must be generated by or delivered to an electric power supplier. ... The most reasonable interpretation, then, is that the General Assembly intended, by the language of the set-aside requirements, to more narrowly require that the RECs acquired to satisfy the set-aside requirements be associated with renewable energy either generated by or delivered to an electric power supplier.

Comments were filed by the North Carolina Sustainable Energy Association (NCSEA), ElectriCities of North Carolina, Inc. (ElectriCities), and the Public Staff. Reply comments were filed by NCSEA and Dominion.

#### POSITIONS OF THE PARTIES

In support of its Motion, Dominion states that it differs from the Commission in its interpretation of the statute in that it agrees that the word "section" in G.S. 62-133.8(b)(2)(e) refers to Section 2(a) of Senate Bill 3, but disagrees that it is

limited to G.S. 62-133.8(b) and (c). Rather than only the general REPS requirements contained in Section 2(a) of Senate Bill 3, or G.S. 62-133.8(b) and (c), Dominion believes "section" means Section 2(a) of Senate Bill 3 and/or all of G.S. 62-133.8, as supported by the Commission's own textual analysis in its Order. As Dominion states, "If the General Assembly had intended to limit the provisions of G.S. 62-133.8(b)(2)(a-f) to the general REPS requirements of G.S. 62-133.8(b), it would have stated, 'An electric public utility may meet the requirements of this subsection by any one or more of the following."

In its comments, ElectriCities agrees with Dominion's interpretation that the compliance methods and limitations (and exceptions to such limitations) set forth in G.S. 62-133.8(b)(2) and (c)(2) (Compliance Methods) apply not only to the compliance obligations set forth in G.S. 62-133.8(b)(1) and (c)(1) but also to the electric power suppliers' compliance obligations set forth in subsections (d), (e) and (f) of G.S. 62-133.8, the solar, swine waste, and poultry waste set-asides. ElectriCities argues,

The Commission, however, mysteriously reached the conclusion in the Duke Order that the term "section" refers only to the general REPS requirements contained in [G.S.] 62-133.8(b)(1) and (c)(1), despite its analysis that seems to lead to the opposite conclusion. ... If "this section" refers to the totality of [G.S.] 62-133.8, as stated by the Commission, how can the Compliance Methods not apply to subsections (d), (e) and (f) of [G.S.] 62-133.8, when they certainly are subsections of [G.S.] 62-133.8? ... These multiple and consistent uses of the term "section" throughout the REPS Legislation to refer to the entire REPS requirement support the position that the General Assembly knew how to use the terms "section" and "subsection" correctly and that if it intended for the Compliance Methods to apply only to the general REPS requirements, the General Assembly would have used the term "subsection" rather than "section" in [G.S.] 62-133.8(b)(2) and (c)(2).

ElectriCities further agrees with Dominion that it does not make sense that the General Assembly would grant Dominion an exemption to the 25% limitation, allowing Dominion to satisfy its general REPS requirement with unbundled out-of-state RECs, but then mandate that Dominion must satisfy its set-aside requirements with RECs "associated" with energy "generated by or delivered to" Dominion.

The policy underlying the Dominion exemption would seem completely undermined if Dominion were not able to use unbundled out-of-state RECs to comply with the set-aside requirements as well as with the general REPS requirement. The only plausible answer is that the Compliance Methods are intended to apply to the set-asides as well as the general REPS requirement, and that Dominion, and other power suppliers, may use truly unbundled out-of-state RECs to satisfy the set-aside requirements.

ElectriCities argues that a literal and practical reading of the REPS legislation provides that electric power suppliers may use unbundled RECs to satisfy the set-asides subject to no more than 25% of the REPS requirement (including the set-asides) of any electric power supplier other than Dominion being met with out-of-state RECs.

The set-asides are a component of the overall general REPS obligation, not in addition thereto; accordingly, the use of unbundled RECs to satisfy the REPS obligation set forth in the REPS Legislation will also meet any set-aside obligation subsumed therein. Furthermore, there is nothing in the REPS Legislation pertaining specifically to the set-asides that is contrary to the permissive language concerning the use of RECs set forth in Subsections 62-133.8(b)(2)(e) and (c)(2)(d) of the REPS Legislation or prohibiting such use. It is ElectriCities' position that an electric power supplier could meet 100% of its set-aside requirements with unbundled RECs, so long as not more than 25% of its overall REPS obligation is satisfied with out-of-state RECs; provided, however, that Dominion is not subject to the 25% out-of-state REC limitation.

ElectriCities argues that the Commission's interpretation disregards the more obvious interpretation that the language of G.S. 62-133.8(e), for example, like the language in G.S. 62-133.8(b)(1) and (c)(1) stating the general REPS requirement, is merely designed to measure the amount of energy required to be met with swine waste.

For instance, the general REPS requirement is measured in percentages of the applicable electric power supplier's North Carolina retail sales, but may be met by any Compliance Method, such as, out-of-state REC purchases, and consumption reductions through energy efficiency, each of which is clearly not a retail sale of electric power in North Carolina. The plain language of the Compliance Methods provides that the same methods may be used to meet the set-asides, and therefore, the measurement language in the set-asides, like the measurement language in the general REPS requirement, is a measurement metric, and nothing more.

Lastly, ElectriCities argues that several additional material issues remain that need to be addressed, including whether a REC used to comply with a set-aside must emanate from the set-aside resource. ElectriCities notes that it previously argued that the REPS legislation does not impose any such obligation, but the Commission in the Duke Order concluded otherwise. ElectriCities argues that only the General Assembly seems capable of addressing issues such as these.

In its comments, NCSEA disagrees with Dominion, arguing that the exception in G.S. 62-133.8(b)(2)(e) does not pre-empt or qualify the express language in the set-aside requirements, which apply to all "electric power suppliers" without regard to size.

[T]he language in each set-aside provision[] is unique, stands alone and, unlike G.S. 62-133.8(b), is not pre-empted or qualified in any way by Section 62-133.8(b)(2)e. The set-aside requirements are not set forth in

G.S. 62-133.8(b) but are in separate parts of the statute, G.S. 62-133.8(d), (e) & (f).

NCSEA further argues that the set-aside requirements demand that the electric power generated with the set-aside resource be "sold to retail customers in the State," and that an electric power supplier acquiring unbundled, out-of-state RECs cannot satisfy this requirement.

Given that the General Assembly enacted the set-aside provisions to promote certain fuel-related technologies in North Carolina and to address in-state issues, it is far-fetched to conclude that the "sold to retail customers" language is accidental or intended to establish an amount to be sold. Rather, the language — "sold to retail electric customers in North Carolina" — is restrictive and perforce limits the geographic location of a set-aside source that can produce electric power and RECs that can count towards compliance with the set-aside requirements. ... NCSEA submits the operative language, "to be sold to retail customers in North Carolina," is even more restrictive than the Commission found and allows only electric power and RECs derived from a facility in North Carolina to be used to satisfy the set-aside requirements. Only in that case, can it be certain that the electric power reaches customers in North Carolina. More importantly, only in that instance are the objectives of the REPS Law fully effectuated.

Thus, DNCP's interpretation of the law is inconsistent with the express language of the statute and is antithetical to the law's intended effect. The goals expressed in the statute are intended to create in-state benefits; indeed, there would be no rational basis for the General Assembly to encourage the development of these resources out-of-state. NCSEA argues that the 25% allowance for out-of-stale RECs was a concession accepted to avoid challenges to the REPS law under the Commerce Clause of the United States Constitution. As such, it "should be interpreted as narrowly as possible and with the understanding that the use of out-of-state RECs for compliance is antithetical to the economical [sic] development objectives the REPS Law is intended to achieve."

In its reply comments, NCSEA addresses many of the arguments set forth by ElectriCities in support of Dominion's interpretation of the REPS law. NCSEA argues that ElectriCities' contention that all of the Compliance Methods are intended to apply to the set-aside provisions is incorrect.

This argument is plainly incorrect: not all of the compliance methods in G.S. 62-133.8(b)(2) and (c)(2) can be used to meet the set-aside requirements. See, e.g., G.S. 62-133.8(b)(2)c and (c)(2)b, c &e. For example G.S. 62-133.8(b)(2)c and (c)(2)b allow the REPS requirements to be met by reductions in energy consumption via demand-side management or energy efficiency. The set-aside requirements cannot be met in that fashion. Likewise, the set-aside provisions cannot be met by the acquisition of energy from a hydroelectric power facility (see G.S. 62-133.8(c)(2)c) or generally, the acquisition of electric power from a wholesaler.

G.S. 62-133.8(c)(2)e. ... It is incongruous to assume Compliance Methods are intended to be applicable if a number of the methods prescribed simply do not fit.

As NCSEA reiterates, "the structure of the law, the restrictive language used in the setaside provisions, and the clear legislative history, all show that the set-aside requirements were designed with a specific purpose in mind and that purpose was to advance certain technologies in North Carolina to address specific local issues."

Lastly, NCSEA criticizes ElectriCities' arguments as unrelated to the Dominion exemption and states that its call for legislative clarification is misplaced.

While perhaps not meant to disparage the Commission, this comment strikes directly at the heart of the Commission's function and its ability to carry out its role. It is the Commission's job to interpret and implement the law and its members were selected precisely for their ability to do this. According to ElectriCities, however, the Commission apparently is incapable of complying with its mandate. ... The Commission reports to the General Assembly on an annual basis, and if needed the General Assembly can modify the legislation that the Commission implements.

In its comments, the Public Staff notes that in its earlier comments, it contended

that the restriction imposed by G.S. 62-133.8(b)(2)(e), under which out-of-state RECs may not be used to meet more than 25% "of the requirements of this section," is applicable only to the general REPS requirement imposed by G.S. 62-133.8(b) and (c), and not to the set-aside provisions in G.S. 62-133.8(d), (e) and (f). Consequently, the Public Staff argued, an electric power supplier is free to satisfy the set-aside requirements entirely with out-of-state RECs, so long as it does not use out-of-state RECs to meet more than 25% of the general requirement.

Although the Commission's decision was not the position initially proposed by the Public Staff, the Public Staff states that it now considers it to be a reasonable interpretation of the statute and recommends that the Commission adhere to the position taken in its May 7, 2009 Order.

In its reply comments, Dominion states that the General Assembly, in enacting Senate Bill 3, recognized two facts about DNCP: first, that Dominion already generates or purchases much of the energy it provides to its North Carolina customers from out-of-state; and second, because of Dominion's relatively low customer base compared to Duke and Progress, it does not necessarily have the economy of scale to purchase instate RECs and renewable energy at a reasonable price. Thus, Dominion argues that the General Assembly provided the exception to recognize the current reality of how Dominion serves its customers with out-of-state generation and to protect its ratepayers from a disproportionate expense for in-state renewable energy and RECs with little benefit in the actual amount of renewable energy that would be provided (even with the

per account cap). Furthermore, though the Public Staff now seems to have changed its position, Dominion believes that the Public Staff's first impression was the better reading of the statute and the General Assembly's intent.

#### DISCUSSION AND CONCLUSIONS

In its May 7, 2009 Order, the Commission determined, as argued by NCSEA, that the phrase "kilowatt hours sold to retail electric customers in the State" contained in the set-aside provisions¹ requires that the energy "associated with the RECs acquired to satisfy the set-aside requirements must be generated by or delivered to an electric power supplier." In so doing, the Commission answered Duke's question by determining that, not only could an electric power supplier not meet 100% of the set-aside requirements with out-of-state RECs, it could not use unbundled out-of-state RECs to satisfy any portion of the set-aside requirements.

This conclusion was supported, first, by a determination of legislative intent that the set-aside provisions were intended "to address renewable energy resources and issues indigenous to North Carolina, and, therefore, to foster development specifically of local renewable energy facilities." In addition, in examining the use of the word "section" in G.S. 62-133.8(b)(2)(e) and (c)(2)(d), the Commission determined that the 25% limitation on the use of out-of-state RECs applied only to the general REPS obligation and not to the individual set-aside provisions set forth in subsections (d), (e) and (f). If 100% of the set-aside requirements could be met with unbundled out-of-state RECs, as argued by the Public Staff and others at the time, stated the Commission, "the set-aside requirements could be satisfied in whole through out-of-state purchases resulting in no benefit for North Carolina swine or poultry operations." Such a result would be inconsistent with the apparent intent of the statute.

Upon reconsideration, the Commission is persuaded that neither of the two extreme positions advanced by one or more parties to this docket<sup>2</sup> – that the set-aside

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 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.

Subsection (e), the swine waste set-aside provision, provides, in part:

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 shall be supplied, or contracted for supply in each year, by swine waste.

Subsection (f) the poultry waste set-aside provision, provides, in part:

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

<sup>&</sup>lt;sup>1</sup> Subsection (d), the solar set-aside provision, provides, in part:

<sup>&</sup>lt;sup>2</sup> ElectriCities, for example, argues that the limit on out-of-state RECs is an aggregate limit applicable to the overall REPS requirement and does not apply to the individual set-aside requirements. Progress

requirements could be wholly satisfied with out-of-state RECs, or that out-of-state RECs could not be used at all to satisfy the set-aside requirements – was intended by the language of the statute. Rather, as initially argued by Duke, the most reasonable interpretation that "harmonizes these statutory provisions [subsections (b), (c), (d), (e) and (f)] consistent with the policy goals of Senate Bill 3 and allows electric power suppliers to utilize out-of-state RECs to meet a portion of their requirements while promoting investment in renewable resources with the State" is that unbundled out-of-state RECs may be used to meet a portion of the set-aside requirements, but that the 25% limitation applies to the general REPS obligation and <u>each</u> of the individual set-aside provisions. This interpretation best reconciles the language of the statute with the legislature's intent to foster local economic development and the use of indigenous renewable energy resources. As Dominion notes, the statute expressly exempts it from the 25% limitation on the use of unbundled out-of-state RECs.

In support of this decision, the Commission first notes that, in its May 7, 2009 Order, it stated:

Subsections (d), (e), and (f) each state that a certain amount "of the total electric power in kilowatt hours sold to retail electric customers in the State shall be supplied by" the set-aside resource. Several parties assert that the phrase "kilowatt hours sold" simply establishes the amount of each set-aside requirement, and that the amount of energy thus calculated must be "supplied" by the particular set-aside resource. NCSEA argues that the General Assembly intended that the energy "supplied by" the particular set-aside resource must actually be "sold to retail electric customers in the State."

As noted above, the Commission proceeded to adopt the position advocated by NCSEA. Upon further review of the language of the set-aside provisions, the Commission notes that the solar set-aside, subsection (d), provides that "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" certain solar facilities. (Emphasis added.) The phrase "or an equivalent

Energy Carolinas, Inc., and the Public Staff similarly urged the Commission to adopt this interpretation in response to Duke's Motion.

Duke further argues that it is allowed to meet the carve-out requirements through the purchase of in-State or out-of-state RECs, subject to the limitation in G.S. 62-133.8(b)(2)(e) that no more than 25% of any one carve-out requirement may be met though the purchase of out-of-state RECs. Under G.S. 62-133.8(b)(2)(d), renewable energy delivered within Duke's service territory constitutes an in-State resource. If the delivered energy is generated outside of North Carolina and the RECs associated with that energy are unbundled or subsequently sold by the electric power supplier, or if energy is not delivered to the service territory of an electric public utility operating in the State, then, argues Duke, the RECs are considered out-of-state and would be subject to the 25% limitation. Duke asserts that its position harmonizes these statutory provisions consistent with the policy goals of Senate Bill 3 and allows electric power suppliers to utilize out-of-state RECs to meet a portion of their requirements while promoting investment in renewable resources with the State.

<sup>&</sup>lt;sup>3</sup> In its May 7, 2009 Order, the Commission summarized Duke's argument on this issue as follows:

amount of energy" was included in the solar set-aside provision in recognition of the fact that electric power suppliers could meet the set-aside requirement by purchasing unbundled RECs from solar thermal facilities. While electric power suppliers "sell" electric power to their retail customers, they do not "sell" energy in any other form. Thus, as ElectriCities and others argue, the Commission is persuaded that the subject phrase ("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") is, in fact, intended simply to establish the amount of each set-aside requirement and not to impose an additional requirement that all of the power (or equivalent amount of energy) be supplied by facilities located within North Carolina. The Commission further determines that the language of the swine and poultry waste setaside provisions should be interpreted consistently with that of the solar set-aside, and that the phrase "kilowatt hours sold" should similarly be interpreted only to establish the total amounts of the swine and poultry waste set-aside requirements in each year and not to impose any requirement on the location of the swine and poultry waste-fueled electric generating facilities.4

The Commission is not persuaded, however, as ElectriCities argues, that the phrase "supplied by" is meaningless. ElectriCities continues to argue that RECs used to comply with the set-aside requirements are not required to "emanate from the set-aside resource." The Commission disagrees. The phrase "supplied by" in each of the setaside provisions makes clear that only RECs that "emanate from the set-aside resource" may be used to satisfy that set-aside requirement; otherwise, the entire setaside would be meaningless. Therefore, while the Commission stated in its May 7, 2009 Order that "the set-aside requirements may be met by any of the means enumerated in G.S. 62-133.8(b)(2), with regard to electric public utilities, or G.S. 62-133.8(c)(2), with regard to electric membership corporations or municipalities," it meant, as stated in the subsequent sentence, "not only the generation or purchase of renewable energy and the acquisition, thereby, of bundled RECs, but also the purchase of unbundled RECs associated with energy derived from the particular set-aside resource." As NCSEA argues, the set-aside requirements cannot be met through energy reductions due to the implementation of energy efficiency or, in the case of electric membership corporations or municipalities, demand-side management measures, and the Commission did not intend to imply that it could.

Secondly, in reconsidering its prior decision, the Commission is persuaded that the reference to "this section" in G.S. 62-133.8(b)(2)(e) and (c)(2)(d) is not a reference to only the general REPS obligation, but also to the electric power suppliers' compliance obligations in subsections (d), (e) and (f). This conclusion, as Dominion notes, is supported by the Commission's own analysis in the May 7, 2009 Order of the use of the word "section" in other parts of Senate Bill 3. As Dominion and ElectriCities argue, "had

<sup>&</sup>lt;sup>2</sup> It was unnecessary for the General Assembly to include the phrase "or an equivalent amount of energy" in the swine or poultry waste set-aside provisions because those two provisions contemplate only the production and sale of electric power from facilities utilizing those renewable energy resources.

the General Assembly wanted 'section' to be limited to the general REPS requirements only, it would have said 'subsection (b) and (c)."<sup>5</sup>

In summary, therefore, each electric power supplier's only REPS obligation in 2010 and 2011 is to acquire RECs equivalent to at least two-hundredths of one percent (0.02%) of its prior year's North Carolina retail electric sales from "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." An electric power supplier may meet this requirement by one or more of the following: generate electric power (and associated RECs) at a new solar electric facility, purchase electric power (and associated RECs) from a new solar electric facility, purchase unbundled RECs from a new solar electric facility, or purchase unbundled RECs from a new metered solar thermal energy facility that uses one or more of the following applications: solar hot water, solar absorption cooling, solar dehumidification, solar thermally driven refrigeration, and solar industrial process heat. As provided in G.S. 62-133.8(b)(2)(e) and (c)(2)(d), however, for all electric suppliers other than Dominion, to which the limitation does not apply. RECs derived from out-of-state new renewable energy facilities shall not be used to meet more than 25% of the solar setaside requirements in any year. Lastly, the Commission notes, from a review of the filed REPS compliance plans and compliance reports, that the electric power suppliers, as anticipated by the statute, have already begun acquiring and banking RECs for compliance with the general REPS obligation beginning in 2012.

IT IS, THEREFORE, SO ORDERED.

ISSUED BY ORDER OF THE COMMISSION.

This the 22<sup>nd</sup> day of September, 2009.

NORTH CAROLINA UTILITIES COMMISSION

Hail L. Mount

Gail L. Mount, Deputy Clerk

Sw092209.01

<sup>&</sup>lt;sup>5</sup> This is particularly highlighted by the General Assembly's use of both the words "section" and "subsection" in G.S. 62-133.8(c)(2)(d): "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." (Emphasis added.)

# 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 PROPOSED
Session Law 2007-397	) AMENDMENTS TO RULES R8-64
	) THROUGH R8-69

BY THE COMMISSION: On February 29, 2008, and March 13, 2008, the Commission issued Orders in this docket adopting rules to implement Session Law 2007-397 (Senate Bill 3). During the past eighteen months, electric power suppliers have filed Renewable Energy and Energy Efficiency Portfolio Standard (REPS) compliance plans and compliance reports; electric public utilities and electric membership corporations have filed for approval of new demand-side management (DSM) and energy efficiency (EE) programs; electric public utilities have filed for approval of REPS incremental cost and DSM/EE rate riders; and numerous entities have filed for registration of generating facilities as renewable energy facilities.

Having gained some experience with Commission Rules R8-64 through R8-69, the Commission is of the opinion that good cause exists to allow electric power suppliers and other interested parties an opportunity to propose specific amendments to these procedural rules that would streamline the Commission's administration of G.S. 62-133.8 and 62-133.9 and to provide appropriate bases for such amendments. In so doing, the Commission is not soliciting requests to clarify, interpret, or modify any provisions of Senate Bill 3.

## IT IS, THEREFORE, ORDERED as follows:

1. That parties may file written comments on or before November 13, 2009, proposing specific amendments to Rules R8-64 through R8-69 that would streamline the Commission's administration of G.S. 62-133.8 and 62-133.9 and providing appropriate bases for such amendments; and

2 That the Commission shall proceed as it deems appropriate upon receipt of the parties' comments.

ISSUED BY ORDER OF THE COMMISSION.

This the 4th day of September, 2009.

NORTH CAROLINA UTILITIES COMMISSION

Hail L. Mount

Gail L. Mount, Deputy Clerk

Commissioners Robert V. Owens, Jr., William T. Culpepper, III, and Susan W. Rabon did not participate in this decision.

Kc090409.01



4325 Mail Service Center Rafeigh, NC 27699-4325

COMMISSIONERS
EDWARD S. FINLEY, JR., Chairman
ROBERT V. OWENS, JR.
LORINZO L. JOYNER
WILLIAM T. CULPEPPER, III

COMMISSIONERS
BRYAN BEATTY
SUSAN RABON
TONOLA BROWN-BLAND

July 1, 2009

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

Dear Secretary Freeman:

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

The Commission is not aware of the receipt of any public comments related to this issue. In order to respond to the General Assembly, I am requesting that the Department provide to the Commission any information it may have "regarding direct, secondary, and cumulative environmental impacts of the implementation of" the REPS requirement, including any public comments received by the Department. Your response by August 14, 2009, is appreciated so that the Commission may meet its October 1, 2009, deadline.

Secretary Dee Freeman June 30, 2009 Page 2

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

Very truly yours,

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

Beverty Eaves Perdue, Governor

August 14, 2009

Dee Freeman, Secretary

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

Dear Mr. Finley,

I am writing in response to your letter of July 1, 2009 to Secretary Freeman requesting any public comment that the Department of Environment and Natural Resources may have received regarding the direct, secondary and cumulative environmental impacts of the implementation of the Renewable Energy and Energy Efficiency Portfolio Standard (REPS).

Since the Department of Environment and Natural Resources has not yet issued any environmental permits for a renewable energy facility, DENR has not received public comment on direct, secondary or cumulative environmental impacts specifically associated with implementation of the REPS.

Since the last REPS report, the Environmental Management Commission has developed recommendations for a wind energy permitting program and sent those recommendations to the General Assembly. A wind energy permitting bill, Senate Bill 1068, passed the Senate, but was not received by the House in time to be considered before adjournment. In debate of the bill, there was significant discussion of the potential direct and secondary impacts of wind turbines – particularly on mountain ridges. DENR does not have a record of comments made in legislative committees; legislative staff may be able to provide information on those comments.

Please call either me or DENR policy analyst Steve Wall at (919) 715-2613, if you have other questions.

Robin W. Smith

Assistant Secretary for Environment

Cc: Steve Wall

1601 Mail Service Center, Raleigh, North Carolina 27699-1601

Phone: 919-733-4984 \ FAX: 919-715-3060 \ Internet: www.enr.state.nc.us/ENR/



# STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. E-100, SUB 83

#### BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of	
Investigation of Net Metering	) ORDER AMENDING
-	) NET METERING POLICY

BY THE COMMISSION: On October 20, 2005, the Commission issued an Order Adopting Net Metering in the above-captioned docket requiring the electric public utilities in this State to file tariffs or riders to allow net metering effective on or before January 1, 2006. On July 6, 2006, the Commission issued an Order on Reconsideration Modifying Net Metering Tariffs and Riders.

As stated in the October 20, 2005 Order, "net metering" generally refers to a billing arrangement whereby a customer that owns and operates an electric generating facility is billed according to the difference over a billing period between the amount of energy the customer consumes and the amount of energy it generates. In its Orders, the Commission required utilities to offer net metering to a customer that owns and operates a solar photovoltaic (PV), wind-powered, micro-hydro, or biomass-fueled electric generating facility. The facility may have a capacity of up to 20 kilowatts (kW) for a residential customer-generator and 100 kW for a non-residential customer-generator and shall interconnect and operate in parallel with the utility's distribution system. Each utility was ordered to make net metering available to customer-generators on a firstcome, first-served basis in conjunction with its approved small generator interconnection standard up to an aggregate limit of 0.2% of the utility's North Carolina jurisdictional retail peak load for the previous year. The Commission's Orders specified that net metering customers must be on a time-of-use (TOU) demand rate schedule<sup>1</sup> and that the utility may not charge the customer-generator any standby, capacity, metering or other fees or charges other than those approved for all customers under the applicable TOU-demand rate schedule. The kilowatt-hour credit, if any, shall be applied to the following monthly billing period, but shall be reset to zero at the beginning of each summer billing season. Any renewable energy certificates (RECs) associated with this excess generation shall also be granted to the utility when the excess generation credit balance is zeroed out.

<sup>&</sup>lt;sup>1</sup> The Commission has approved both TOU-energy and TOU-demand rate schedules for use in North Carolina. Under TOU-energy rate schedules, a customer is billed at a different rate for energy used during on-peak and off-peak hours. Under TOU-demand rate schedules, the on-peak and off-peak rates are slightly lower than under the TOU-energy rate schedules, but the customer also incurs a demand charge based upon its highest energy usage during any 15-minute period during the month.

Following issuance of the October 20, 2005 Order, the North Carolina Sustainable Energy Association (NCSEA) filed a Motion for Reconsideration of several issues alleging that the net metering policy "is too complicated and restrictive and it creates uncertainty." In addition to its objection to the requirement for use of a TOU-demand rate schedule due to the complexity of understanding such schedules, the NCSEA argued that net metering customers should be allowed to install systems with batteries, that micro-hydro generation should be allowed as an eligible technology, and that all associated RECs should remain with the customer-generator.

On February 3, 2005, the Public Staff filed a response to the Motion for Reconsideration in which it noted that the current State energy policy generally favored the availability of TOU rates and that the Commission had stated its intent to monitor and review implementation and use of net metering, which would allow reconsideration of the requirement to use TOU-demand rate schedules after more experience was gained.

In its July 6, 2006 Order on Reconsideration, the Commission stated that the requirement of TOU-demand rates addresses concerns about potential discrimination and cross-subsidization between those customers who do and those who do not choose to net meter. It also declined to find that such rates were too complicated. With regard to ownership of RECs, the Commission held that it had properly allocated costs when it granted excess energy and RECs to the utility to offset, in part, the costs that would be borne by the utility and non-participating ratepayers, but barred the utility from charging additional standby, metering, or other charges. The Commission stated that:

[w]hile the magnitude of these costs and benefits are uncertain and cannot be reasonably predicted, the Commission remains convinced that its decision appropriately allocates these costs and benefits among net metering customers, utilities, and their remaining ratepayers.

Duke Energy Carolinas, LLC (Duke); Progress Energy Carolinas, Inc. (Progress); and Virginia Electric and Power Company, d/b/a Dominion North Carolina Power (Dominion), filed net metering tariffs as required by the Commission. As of October 1, 2008, only four customers are reported to have chosen to net meter. Most customergenerators eligible for service under the net metering tariffs have instead chosen to sell all of the energy from their generating facilities to the utility to which they are interconnected pursuant to an avoided cost rate schedule and to participate in the NC GreenPower program.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> As of February 28, 2009, NC GreenPower purchases RECs from 219 solar PV facilities. NC GreenPower does not provide an incentive payment to customers who choose to net meter. Duke currently has 35 customers on its Rider SCG (Small Customer Generator) that generate electricity to offset their purchases and that sell excess energy to Duke at its avoided cost rates. These customers are eligible to participate in NC GreenPower to the extent of any excess energy sales to Duke.

#### SESSION LAW 2007-397 (SENATE BILL 3)

Since the Commission initially allowed net metering in 2005, the General Assembly amended North Carolina energy policy by enacting Session Law 2007-397 (Senate Bill 3) to promote the development of renewable energy in this State. G.S. 62-2(a)(10). As part of this comprehensive energy legislation, the General Assembly directed the Commission to "[c]onsider whether it is in the public interest to adopt rules for electric public utilities for net metering of renewable energy facilities with a generation capacity of one megawatt or less." G.S. 62-133.8(i)(6).

On June 9, 2008, the Commission issued an Order Establishing Procedural Schedule to comply with this mandate from the General Assembly. The Commission noted that cross-subsidization from non-participating customers to customer-generators is the central issue in deciding whether to expand net metering to larger generators of one megawatt (MW) or less, quoting from its October 20, 2005 Order:

The Commission notes that all parties concede that allowing net metering will result in the potential for subsidies for those customers. A number of other benefits, however, have been advanced that could potentially offset any such subsidies. On balance, recognizing the benefit of additional renewable electric generation in this state, the Commission concludes that this represents an appropriate next step forward.

The June 9, 2008 Order also noted that the Commission's rules currently limit both the size of individual generators and the total amount of generation eligible for net metering. The Commission pointed out, as well, that the Renewable Energy and Energy Efficiency Portfolio Standard (REPS) established by Senate Bill 3 and the Commission's rules implementing the REPS have created a new market for the RECs associated with net-metered renewable energy facilities. The Commission determined that, pursuant to the mandate imposed upon it in Senate Bill 3, it would consider whether to allow net metering of solar PV, wind-powered, micro-hydro, or biomass-fueled electric generating facilities up to 1 MW or some smaller size; whether to allow additional types of generating facilities to net meter; and whether to change other terms and conditions under which generating facilities currently are allowed to net meter.

#### PARTIES, FILINGS, AND PUBLIC HEARINGS

In its June 9, 2008 Order, the Commission requested that the parties file testimony and exhibits addressing seven specific questions as well as any additional information for the Commission's consideration. The seven questions involved consideration of the following issues: quantification of the potential cross-subsidization under several scenarios; whether RECs should be accrued by the utility or retained by the generator; whether the total generation eligible for net metering should be increased; whether additional kinds of electric generating facilities should be eligible for net metering; and comparison of the overall economics of net metering larger renewable customer-owned generators under various scenarios for REC ownership versus the

bids utilities have received in response to their requests for proposals for renewable energy and/or RECs for REPS compliance.

On August 20, 2008, the North Carolina Chapter of the Sierra Club requested that the Commission hold public hearings in Charlotte and Raleigh as part of its consideration of the net metering issues specified in the Commission's June 9, 2008 Order. Sierra Club stated its belief that the Commission would benefit from hearing directly from small businesses and individuals who would like to participate in net metering. On August 29, 2008, the Commission issued an Order scheduling public hearings in Charlotte and Raleigh, requiring publication of notice, and revising the procedural schedule for filing rebuttal testimony and exhibits and for filing proposed orders and briefs.

Progress, Duke, Dominion, NCSEA, and the Public Staff continued to actively participate as parties to this docket. In addition, interventions were filed and granted for Interstate Renewable Energy Council (IREC) and for Wal-Mart Stores East, LP, and Sam's East, Inc. (collectively, Wal-Mart). Other parties previously allowed to intervene in this docket include American Solar Energy Society; American Wind Energy Association; Carolina Utility Customers Association, Inc.; Enerdyne Power Systems, Inc.; North Carolina Association of County Commissioners; North Carolina Consumers Council, Inc.; Solar Energy Industries Association; Southern Environmental Law Center; the City of Greensboro; the City of Durham; the Town of Chapel Hill; and Rhonda Smith-Frazier. The intervention and prior participation of the Attorney General is recognized pursuant to G.S. 62-20.

On August 29, 2008, expert witness testimony was filed by Richard P. Mignogna and Donald Morrow on behalf of NCSEA; David F. Koogler on behalf of Dominion; Jane L. McManeus and Christopher M. Fallon on behalf of Duke; Laura A. Bateman on behalf of Progress; and Michael T. Sheehan and Gary L. Nakarado on behalf of IREC.

On September 5, 2008, Carolinas Clean Air Coalition filed a letter requesting that the Commission schedule public hearings in Asheville and in Raleigh. On September 12, 2008, the Commission issued an order denying that request because the Commission had already scheduled public hearings in Charlotte and Raleigh.

On September 30, 2008, and October 2, 2008, the Commission held public hearings, as scheduled, in Raleigh and Charlotte. Altogether, 22 members of the public spoke at the hearings. Five of the public witnesses stated that they work for renewable energy businesses. Three of the public witnesses stated that they work for environmental policy organizations. Most of the public witnesses stated that policies regarding net metering should be changed so as to make distributed solar generation financially viable for homeowners and businesses. One witness testified that if Duke is allowed to earn a fair return on its investments in distributed solar energy, the Commission should extend that same fair return to customers who do the same. Many witnesses testified that better net metering policies will encourage distributed renewable generation and that distributed renewable generation should be encouraged because it

will provide environmental benefits, create jobs, reduce energy losses on the distribution and transmission systems, and provide sources of emergency power. About one-third of the public witnesses stated that the Commission should allow larger generators to participate in net metering, that the price utilities pay for power should equal the retail price they charge for power, and that customers should be allowed to own all of the RECs associated with their electric generation. Several public witnesses stated that customer-generators should not be required to participate in net metering via a TOU-demand tariff and that monthly fees or charges and interconnection fees should be waived. Many people stated that they find the process of self-generation to be cost-prohibitive and confusing and that it involves too much paperwork. Several public witnesses stated that North Carolina's net metering policies compare poorly with those in other states.

In addition, the Commission received eight consumer statement letters in this docket echoing the comments made at the public hearings. In addition, several were from homeowners who had installed solar PV systems and arranged to sell the output to NC GreenPower. They stated that initial contracts with NC GreenPower are short-term (five years) and expressed support for fair policies that would make net metering a viable option for them.

On or about November 10, 2008, parties submitted rebuttal testimony as follows: Rosalie R. Day on behalf of NCSEA; Gary L. Nakarado on behalf of IREC; Edmund P. Finamore on behalf of Wal-Mart; Christopher M. Fallon and Jane L. McManeus on behalf of Duke; and Laura A. Bateman on behalf of Progress.

Duke, IREC, Wal-Mart, NCSEA, and the Public Staff filed briefs on December 22, 2008. Dominion and Progress filed comments in lieu of a brief.

### **POSITIONS OF THE PARTIES**

As stated in the June 9, 2008 Order, the primary issue before the Commission pursuant to Senate Bill 3 is whether to allow larger renewable generators up to 1 MW to be eligible to net meter. The Commission sought input regarding the degree to which net metering involves cross-subsidies and the potential for cross-subsidization where the associated RECs are either accrued by the utility or retained by the generator. The Public Staff noted, however, that the cross-subsidy calculations provided by Duke, Progress and Dominion were not particularly helpful. Each utility used a different methodology to calculate any cross-subsidy. For example, Duke subtracted the avoided cost from net lost revenue and determined that a subsidy existed if the result was positive, while Progress subtracted the avoided energy cost from annual lost revenue to determine the subsidy. Dominion added the standby charge and additional metering charges to arrive at a subsidy amount. NCSEA noted that the problem with this analysis is that any cross-subsidies that occur are inherent in the existing rate structure and are not a product of net metering. While the Public Staff believed that, in most cases, net metering would result in some subsidization of self-generators, it did not find that the calculations provided by the utilities adequately captured the costs and benefits. The

Public Staff proposed that the Commission order the utilities to conduct a cost of service study within 90 days to review the calculation of standby and metering charges to ensure that they are appropriate.

NCSEA, IREC and Wal-Mart argued that the utilities did not fully quantify the benefits of self-generation, especially self-generation from renewable energy resources, such as energy independence; local job creation; reduced emissions; line loss reductions; improved voltage; diminished land use effects; lower right-of-way acquisition costs; reduced capacity, transmission and distribution costs; reduced congestion; and reduced vulnerability of the system to terrorism.

All parties directly or indirectly acknowledged that, with the passage of Senate Bill 3, RECs currently have more value than they did when the Commission last acted on net metering policy. The utilities generally refrained from explaining how the bids they've received for renewable energy and/or RECs compare to the economics of net metering. Even so, Duke stated that, based on current REC values and current TOU rates, the net metering scenario under which all RECs would accrue to the utility at no additional cost and apply toward REPS compliance appears to be equal or superior to purchasing an equivalent amount of energy and RECs in the market. Duke stated that for solar generation, given current market values, it is appropriate to allow generators up to 1 MW to net meter if the RECs accrue to the utility, provided sufficient transmission and distribution infrastructure exist.

While Progress believes that it would only be by chance if the costs of cross-subsidization matched the value of acquiring the RECs at no cost, it stated that if the Commission increases the allowable size for net metering participants, it should also address the issues of timely recovery of all costs by the utilities and the ownership of RECs associated with net-metered renewable energy. Progress stated that utilities should be allowed to recover all costs of net metering through the REPS cost recovery rider. Recoverable costs should include all costs paid to net metering participants for excess energy, the difference between the value of any credits received by the participant for net-metered energy and the utility's avoided energy costs, any other costs associated with the net metering program, and any other reductions in revenue incurred by the utility due to the net metering program that have the effect of denying the utility recovery of its fixed costs. The net metering participant should be required to convey to the utility all RECs associated with the renewable energy generated under the net metering program to be used by the utility to satisfy its REPS requirement.

The Public Staff noted Progress's request to recover all costs of net metering through the annual REPS cost recovery rider, that the participants be required to convey all RECs associated with renewable energy generated to the utility, and the utility be allowed to use these RECs towards compliance with its REPS requirement. The Public Staff opposed Progress's request because the utilities have requested direct recovery of metering and standby charges associated with such generation, as well as the grant of all net excess generation at the end of the program year. TOU-demand rates compensate the utilities for any costs. The Public Staff asserted that to also allow

recovery of all costs through the annual REPS cost recovery rider would allow utilities to double recover their costs. The Public Staff stated that Progress's and Duke's requests for all RECs associated with the energy generated through net metering underscored the increasing value of RECs. The Public Staff stated that, if the utilities propose to receive all RECs associated with the total generation along with direct cost recovery and cost recovery through the annual REPS cost recovery rider, they would be over-recovering even more.

NCSEA noted that Senate Bill 3 created a market for North Carolina RECs that did not previously exist. NCSEA stated that taking the RECs and excess energy at the beginning of each summer season precludes a customer-generator from using the full output of its renewable energy facility and stands in contrast with the State's policy objectives. G.S. 62-133.8(i)(7) indicates that energy and the associated RECs are the private property of the customer-generator and requires the Commission to:

Develop procedures to track and account for renewable energy certificates, including ownership of renewable energy certificates that are derived from a customer owned renewable energy facility as a result of any action by a customer of an electric power supplier that is independent of a program sponsored by the electric power supplier. (Emphasis added.)

NCSEA argued that the granting of the personal property of a net-metered customer-generator to the utility, without just compensation, is an unconstitutional taking. Customer-generators can participate in net metering only if they are willing to forfeit property to the utility. NCSEA asserted that this forfeiture is mandatory and coerced. NCSEA stated that, based on the utilities' testimonies, the value of any alleged cross-subsidy to customer-generators is insignificant in comparison to the expected value of the RECs.

With regard to the question of whether larger (up to 1 MW) customer-generators should be allowed to net meter, Dominion stated that net metering was not needed for larger installations because they have other tariff options. Duke and Progress stated generally that expanding the size of net metering is not recommended, but would be acceptable so long as all of the associated RECs accrue to the utility at no additional cost and the costs of net metering can be recovered through the REPS rider. Dominion stated that if the Commission decides larger customers can participate in net metering, those customers should be required to pay standby and metering charges. Duke argued that standby charges (and power factor charges) are necessary unless the RECs earned by the customer-generator accrue to the utility. Progress stated that standby charges should be applicable to larger net-metered customer-generators to minimize cross-subsidies by other ratepayers.

IREC, NCSEA and Wal-Mart each stated that larger customer-generators should be allowed to net meter, while the Public Staff agreed so long as a study is conducted to sort out the issue of cross-subsidies. IREC supported an increase in eligibility for net-metered systems up to 1 MW without imposing any additional standby charges or fees.

NCSEA noted that the public interest is served by encouraging private investment in renewable distributed generation (DG). NCSEA noted that Duke highlighted the benefits of DG in its Application for Approval of Solar Photovoltaic Distributed Generation Program filed in Docket No. E-7, Sub 856. NCSEA quoted Duke's Application as offering "solutions to some of the nation's pressing energy and electric power problems, including power quality issues, tighter emissions standards and transmission bottlenecks." NCSEA asserted that utilities inappropriately dismiss the benefits of DG when the systems are privately owned. The Public Staff believed that for systems above 20 kW, standby and metering charges are appropriate because these costs cannot be considered merely de minimis and proposed that the utilities conduct a cost of service study to review the calculation of such charges. Wal-Mart stated that the Commission should prohibit charges for standby service because there is insufficient operating experience with customer self-generation to determine the real costs with any reasonable accuracy.

Similarly, parties disagreed as to whether it is appropriate to require net metering customer-generators to participate via a TOU-demand tariff. Dominion stated that requiring customer-generators to participate in net metering via a TOU-demand rate schedule achieves a balanced approach to net metering. Duke asserted that TOU-demand rates are still necessary, absent other protections. Duke conceded, however, that if RECs from solar generation were to accrue to the company without additional cost, it might not be necessary for those customer-generators to be on a TOU rate. Progress stated that under a TOU-demand tariff, the energy credit that is received for excess generation more closely matches the costs avoided by the utility since the energy rate primarily recovers energy-related costs. Similarly, to the extent the customer reduces their on-peak demand they will receive a billing benefit that better recognizes any reduction in the utility's investment in fixed costs needed to provide service. This approach doesn't eliminate cross-subsidy issues, but minimizes them within the context of current rate designs.

On the other hand, IREC argued that the current TOU-demand rate requirement may serve as a significant impediment to private investment in renewable energy systems. Customers should have the ability to select the retail tariff that is most appropriate for their load profile. While NCSEA generally supported expanding TOU rates to more customer segments because these rates provide incentives for customers to shift their consumption from on-peak to off-peak times, NCSEA argued that the TOU-demand rate devalues on-peak production for net-metered customer-generation because the net-metered customer-generator is compensated at a lower energy rate than the generator would otherwise be under with either a TOU-energy or flat rate schedule. NCSEA asserted that customer-generators under a TOU-demand rate do not receive full market value for their on-peak production and lose out on the full value of their investment. NCSEA stated that customer-generators should have the option of subscribing to a TOU-energy rate so that credits for their on-peak production can better offset their charges for on-peak consumption. NCSEA did not oppose requiring a large net-metered customer-generator to participate in a TOU-demand rate so long as they would have been required to do so absent their generation.

The Public Staff believed that TOU rates are appropriate to properly compensate net metering customers for on-peak and off-peak generation and charge them for usage. However, the Public Staff agreed with NCSEA that the residential TOU-demand rates contain a ratchet mechanism that can be punitive if the demand charge is set early in the applicable period based on unusually high and short-lived demand. The Public Staff believed that the use of TOU-energy rates for residential net metering customers would avoid this potentially punitive ratchet effect while continuing to send the proper pricing signal inherent in TOU rates.

Regarding the issue of whether the 0.2% aggregate cap on net metering should be removed, Dominion stated that a "stepped" approach to increasing the level of participation would be appropriate. Duke opposed increasing the aggregate limit unless the customer-generators' RECs accrue to the utility, arguing that any increase in the aggregate limit runs the risk of exacerbating subsidies that exist and will result in higher costs to customers. Similarly, Progress opposed raising the limit at this time, stating that the limit should be retained until sufficient generation is installed to require a change.

IREC stated that the aggregate limit should be removed. By expanding net metering to systems up to 1 MW and removing the cap on cumulative capacity of net-metered systems, the Commission can facilitate enough customer investment in net-metered renewable energy to allow the cost of serving a net-metered customer to be determined. IREC noted that Duke requested authorization for a similar approach in connection with its photovoltaic proposal in Docket No. E-7, Sub 856. The Public Staff stated that if cross-subsidization is properly addressed, the 0.2% aggregate limit should not be necessary to limit any potential subsidy to net metering customers. Parties have not indicated that raising the cap would affect the integrity of the utilities' systems. The Public Staff recommended that the cap be raised and the onus be placed on the utilities to notify the Commission if the integrity of the utilities' systems is threatened. Wal-Mart stated that the Commission should increase the aggregate limit on net metering to at least 2%, and stated that retaining the arbitrary limit could restrain future development of renewable generation.

As to the issue of whether other kinds of renewable generation should be eligible for net metering, only Duke expressed opposition, stating that the type of electric generating facility eligible for net metering should not be expanded beyond solar PV, wind-powered, micro-hydro, or biomass-fueled electric generating facilities.

Duke stated that it is willing to expand its Small Customer Generator Rider (Rider SCG) rate schedule to larger customer generators, up to 1 MW, provided that the rider continues to include provisions for standby charges and power factor correction for generators larger than 20 kW. (The rider is currently available for residential customers with generator output/peak load of 20 kW or less and nonresidential customers with generator output/peak load of 100 kW or less.) Duke stated that this rate schedule is designed appropriately because it pays the customer-generator for energy at an avoided cost rate and includes provisions for standby charges, metering charges and power factor correction. IREC supported Duke's proposal to increase the size of

customer-generators eligible to participate in its Rider SCG, but noted that the rider falls short of an expansion in net metering because it does not provide for the netting of inflows and outflows. NCSEA stated that Duke's Rider SCG does not contain monthly rollover provisions. NCSEA further noted that, for systems greater than 20 kW, Duke's Rider SCG contains standby charges based on the generator's nameplate capacity rating. While Rider SCG is not a true net metering rider, NCSEA supported Duke's suggestion to expand the rider to allow customer-generators up to 1 MW in size to participate.

Lastly, NCSEA argued that current net metering rules are not effective, as indicated by lack of participation and the statements of public witnesses at the public hearings. NCSEA requested that the Commission revise the net metering rules so that: 1) customer-generators receive credit for all RECs and energy they produce; 2) customer-generators are paid for excess energy at the time of the annual true-up based on the utility's avoided cost rate; 3) customer-generators can select the underlying rate schedule that is best for them; 4) the aggregate system limit for net-metered customer-generators is expanded to 2% of the utility's annual peak load; 5) standby charges are waived for customers that participate via a TOU-demand rate; and 6) customer-generators with systems up to 1 MW can participate provided the generator size does not exceed the customer-generator's load. NCSEA stated that, while customergenerators might be eligible to participate in NC GreenPower, that organization is approaching the point of being over-subscribed in relation to its funding and, as a result, has decreased its REC offering for small solar customer-generators from 18 cents/kWh to 15 cents/kWh. There is no guarantee that NC GreenPower will be able to accommodate all customer-generators at or below 10 kW or offer a reasonable price for RECs. NCSEA stated that net metering is needed to promote private investment in DG. NCSEA is concerned that non-residential net-metered customer-generators would be subject to standby charges under Dominion's Schedules 5P and 6P. NCSEA stated that these are TOU-demand schedules that appear to meet the requirements of North Carolina's net metering rules. However, NCSEA stated that these schedules inappropriately include standby charges for net-metered customer-generators.

#### DISCUSSION AND CONCLUSIONS

After careful consideration of the evidence and arguments presented in this proceeding, the Commission concludes that the current net metering rule should be revised in order to support recently adopted State policy and further promote the development of renewable energy in North Carolina. The Commission is not persuaded that the fact that there are relatively few net metering participants at this time evinces fatal flaws with the existing policy; rather, it demonstrates the wealth of potentially economically superior alternatives for customer-generators. Nevertheless, the Commission finds that several aspects of the current net metering rule should be clarified and simplified to conform to the recently amended generator interconnection procedures and to enhance the value of net metering as a viable alternative for customers that desire to install renewable generation to offset their own electric consumption and demand.

First, when the current net metering rule was adopted in 2005, the Commission imposed a number of restrictions - such as limits on the size of individual facilities eligible to net meter and the aggregate amount of net-metered capacity - designed to limit any potential adverse impacts associated with the new policy. In response to the mandate in Senate Bill 3, the Commission sought evidence with which to quantify the potential effects of allowing larger generators to net meter. As noted by several parties, the data submitted by the utilities provide an incomplete picture of the costs and benefits afforded by additional, and larger, net-metered renewable generation. The utilities' testimony and cost data, while asserting that the current net metering policy is rife with cross-subsidies that benefit customer-generators, focused on lost revenues rather than actual costs and ignored many potential benefits. The Commission agrees with those parties that assert that renewable customer-owned generation almost certainly provides some additional benefits and that the utilities should have acknowledged those benefits in their analyses. Even so, the presence of crosssubsidies alone is not dispositive, and the evidence presented in this proceeding and the clearly enunciated State policy favoring development of additional renewable generation support expanding net metering eligibility to renewable generation with capacity up to 1 MW.3 While the Public Staff's proposal to pursue additional cost studies has merit, the Commission is concerned that further study will unduly delay the State's efforts to meet more of its electricity needs via renewable resources.

Another rationale underlying the size limits originally placed on individual net-metered facilities was a desire for conformity with the then-effective generator interconnection standard. On June 9, 2008, in Docket No. E-100, Sub 101, the Commission approved a revised generator interconnection standard that provides a process for reviewing applications for interconnection of generators of any size. Thus, the revised interconnection standard is sufficient to accommodate requests for interconnecting a net-metered generator up to 1 MW, and the interconnection studies required under the generator interconnection standard ensure that a customergenerator fund any required electric utility system upgrades. Lastly, continuing the policy of resetting the credit balance to zero at the beginning of the summer billing season and granting any excess energy to the utility at no charge will effectively limit the size of individual net-metered generating facilities. Therefore, given the failure to adequately quantify the actual costs and benefits of net metering and the protections provided by the generation interconnection process, the Commission concludes that it is in the public interest to allow larger customer-generators up to and including 1 MW in

<sup>&</sup>lt;sup>3</sup> In fact, cross-subsidies exist throughout utility tariffs in support of various State policies. Economic development rates, such as that recently approved for Progress in Docket No. E-2, Sub 681, are but one example in which the Commission has determined that certain policy benefits outweigh the cost of cross-subsidies.

<sup>&</sup>lt;sup>4</sup> In its October 20, 2005 Order Adopting Net Metering, the Commission stated, "The requirement that excess seasonal generation (and associated RECs) be granted to the utility will appropriately limit the size of individual facilities, yet allow a customer-generator to utilize the full output of its renewable energy facility."

size to net meter and that it is not necessary to continue to impose any aggregate limit on net metering at this time.

In increasing the size limit on eligible customer-owned generation to 1 MW, the Commission concludes that the existing policy with regard to standby charges should be retained. Utilities are currently precluded from charging customer-generators any standby charges or any additional metering charges other than those that are charged to non-generating customers under the applicable rate schedule. The utilities testified that standby charges should apply to larger generators if they are allowed to participate in net metering. The Commission, therefore, concludes that, under the revised net metering rule, utilities should continue to be prohibited from imposing standby charges for customer-generators with capacity of up to 20 kW for residential customers and 100 kW for non-residential customers, i.e., those customer-generators that are allowed to net meter under the existing policy. However, utilities should be allowed to impose standby charges on larger customer-generators consistent with approved standby rates applicable to other customer-owned generation. This policy does not disadvantage netmetered customer-generators, but treats all customer-owned generation larger than 20 kW for residential customers and 100 kW for non-residential customers consistently without regard to whether the customer-generator is participating in net metering. Standby charges for smaller net-metered customer-generators would continue to be waived. As noted by NCSEA, Dominion should be required to file revised Schedules 5P and 6P to comply with this prohibition against standby charges for net-metered customer-generators with capacity of up to 20 kW for residential customers and 100 kW for non-residential customers.

Second, in its October 20, 2005 Order Adopting Net Metering, the Commission stated that it "intends to continue to review the implementation and use of net metering," including the requirement that net-metered customer-generators take service pursuant to a TOU-demand rate schedule. In that Order, the Commission stated that the TOU-demand rate schedule requirement addressed concerns about the potential mismatch of off-peak generation and on-peak consumption and more appropriately compensated the utility for any standby capacity than would a TOU-energy rate schedule. On reconsideration, the Commission reiterated that the TOU-demand requirement appropriately allocated the costs and benefits of net metering among net metering customers, utilities, and their remaining ratepayers, NCSEA and others, however, continue to urge the Commission to eliminate the TOU-demand rate schedule requirement for net metering customer-generators. A number of public witnesses testified that they were willing to invest in renewable generation if allowed to net meter, but that the TOU-demand rate schedule requirement was one reason that had caused them not to do so. The Public Staff argued that the residential TOU-demand rate can be punitive if the demand charge is set early in the billing period based on unusually high and short-lived demand. Although customers can realize savings under TOU rates, the evidence demonstrates that the requirement that customer-generators switch to a TOUdemand rate is a deterrent and has actually inhibited the installation of renewable generation. Absent meaningful data regarding the potential magnitude and direction of cross-subsidies, the Commission concludes that utilities should offer customergenerators the option of net metering under any rate schedule available to customers in the same rate class in order to further encourage the development of renewable generation.

The Commission further finds that the current requirement that RECs associated with the energy annually granted to the utility should also accrue to the utility creates uncertainty, effectively renders all RECs earned by the customer-generator unmarketable, and, therefore, should be revised. Under the current approach, there is no way to estimate how the RECs associated with the customer's generation will ultimately be divided at the end of the year between the customer-generator and the utility. Without the ability to determine with certainty the number of RECs for which ownership will be retained, a customer-generator cannot enter into a contract to sell the RECs earned each month. Therefore, in order to provide the necessary certainty, for net-metered customer-generators that elect to take service pursuant to a TOU-demand tariff (as was required, but which will now be optional), all of the RECs associated with the customer's generation shall be the property of the customer-generator. The Commission recognizes, however, that allowing a customer-generator to net meter while taking retail electric service pursuant to a rate schedule other than a TOU-demand rate schedule alters the balance among net metering customers, utilities, and their remaining customers previously found by the Commission to be fair and appropriate. Therefore, in exchange for allowing a net metering customer-generator to elect to take service under a retail rate schedule other than a TOU-demand rate schedule, all RECs associated with the customer's generation should be assigned to the utility at no cost as part of the net metering arrangement.

NCSEA argued that assigning RECs to the utility as part of the net metering arrangement constitutes an unconstitutional taking of private property. The Fifth Amendment of the United States Constitution, made applicable to the states by the Fourteenth Amendment, prohibits the taking of private property for public use without just compensation. In its brief, NCSEA argued that, under current net metering rules, customer-generators can participate in net metering only if they are willing to forfeit property, energy and RECs, to the utilities. The forfeiture is mandatory and coerced. The customer-generators' only choice is not to participate in the Commission-sponsored program, which in turn deprives them financially and potentially to the point of making any venture uneconomical. In essence, argued NCSEA, there is no real choice. Once the customer-generators elect to participate in the net metering program, they are required by the Commission's rule to forfeit property to the utilities.

The Commission rejects NCSEA's argument and concludes that the constitutional takings analysis simply does not apply in this instance. Utility tariffs commonly include terms and conditions that impose certain obligations on customers in return for certain benefits. NCSEA argued that, once customer-generators elect to participate in net metering, they have no choice about the terms of participation. Customer-generators do have a choice, however, in whether or not to participate in net metering — no one coerces their participation. In fact, customer-generators have the choice of net metering, electing another arrangement for the sale of excess generation,

or ignoring excess generation, if any, entirely. Under the revised net metering rule adopted herein, customer-generators even have a choice of participating in net metering and taking retail electric service under a TOU-demand or other rate schedule. There is no coercion, as premised by NCSEA. Nevertheless, just as customer-generators seek to net meter without incurring certain additional charges, they must in return be willing to assign to the utility the right to their RECs if they elect to net meter under a non-time-differentiated rate schedule or a TOU rate schedule in which they incur no separate demand charge. Net-metered customer-generators may continue to choose to take retail service pursuant to a TOU-demand rate schedule and retain ownership of all RECs associated with their renewable generation. Alternatively, customer-generators could choose to participate in net metering via another tariff, such as one that values all energy consumed equally. In such cases, the benefits to the customer-generator are significant enough that the RECs associated with the facility's total energy production should accrue to the utility.

The Commission disagrees with Progress, however, that the costs of net metering, even where the customer-generator's RECs are assigned to the utility, should be recovered through the REPS incremental cost rider. Costs associated with bundled energy and RECs are not necessarily recovered through the REPS rider, as evidenced by the recovery of costs associated with the Swine Farm Methane Capture Pilot Program. See Order Adopting Final Rules. Docket No. E-100, Sub 113, at p. 10 (Feb. 29, 2008). Moreover, because the costs and benefits of net metering are not well defined and because it is not clear at this time that net metering imposes substantial costs on the utility, the Commission will deny Progress's request to recover all costs of net metering through the REPS cost recovery rider.

Third, customer-generators that generate electricity using micro-hydro, wind, solar PV or biomass are currently eligible to net meter. Senate Bill 3 adopted the following definition of "renewable energy resource," G.S. 62-133.8(a)(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.

Senate Bill 3 further defines "renewable energy facility" to include, G.S. 62-133.8(a)(7):

a facility, other than a hydroelectric power facility with a generation capacity of more than 10 megawatts, that ... [g]enerates electric power by the use of a renewable energy resource.

Because Senate Bill 3 was enacted since net metering was initially adopted in 2005, the Commission finds good cause to adopt a consistent definition for renewable energy resource and renewable energy facility with regard to eligibility to net meter to support the policies set forth in that legislation. Therefore, the Commission concludes that the eligibility provision of the net metering rule should be revised to include any renewable energy facility with a generating capacity up to 1 MW that generates electric power using a renewable energy resource as defined above and in Senate Bill 3. Note that this excludes renewable energy facilities under Senate Bill 3 that generate only thermal energy. In order to be eligible to net meter, the renewable energy facility must generate electricity that flows through the utility meter.

Lastly, the Commission continues to believe, as stated in its October 20, 2005 Order, that net metering is "designed for owners of small-scale renewable generation installed for the customer's own use, not for sale to the utility." Thus, net metering is but one alternative billing arrangement for a customer that intends to own and operate renewable electric generation or to take advantage of renewable energy resources to offset energy purchases from the utility. In approving revisions to the net metering policy, the Commission continues to adopt a reasonable balance between utilities, net metering customers, and the utilities' remaining customers while recognizing the significance of changes in State policy.

With regard to one such alternative, the Commission acknowledges Duke's offer to extend the availability of its Rider SCG to larger customer-generators. The Commission finds that Duke's proposal furthers the State policy of promoting increased development of renewable generation and is in the public interest. The Commission, therefore, concludes that Duke should file a revised Rider SCG consistent with its offer that makes the rider available to customer-generators with capacity of up to 1 MW.

In summary, the Commission concludes that Duke, Dominion and Progress should file revised riders or tariffs that allow net metering for any customer that owns and operates a renewable energy facility that generates electricity with a capacity of up to 1 MW. The customer shall be required to interconnect pursuant to the approved generator interconnection standard, which includes provisions regarding the study and implementation of any improvements to the utility's electric system required to accommodate the customer's generation, and to operate in parallel with the utility's electric distribution system. The customer may elect to take retail electric service pursuant to any rate schedule available to other customers in the same rate class and may not be assessed any standby, capacity, metering or other fees other than those approved for all customers on the same rate schedule. Standby charges shall be waived, however, for any net-metered residential customer with electric generating capacity up to 20 kW and any net-metered non-residential customer up to 100 kW. Credit for excess electricity generated during a monthly billing period shall be carried forward to the following monthly billing period, but shall be granted to the utility at no charge and the credit balance reset to zero at the beginning of each summer billing season. If the customer elects to take retail electric service pursuant to any TOU rate schedule, excess on-peak generation shall first be applied to offset on-peak

consumption and excess off-peak generation to offset off-peak consumption; any remaining on-peak generation shall then be applied against any remaining off-peak consumption. If the customer chooses to take retail electric service pursuant to a TOU-demand rate schedule, it shall retain ownership of all RECs associated with its electric generation. If the customer chooses to take retail electric service pursuant to any other rate schedule, RECs associated with all electric generation by the facility shall be assigned to the utility as part of the net metering arrangement.

#### IT IS, THEREFORE, ORDERED as follows:

- 1. That Progress, Duke and Dominion shall file in this docket no later than May 1, 2009, revised tariffs or riders to allow net metering as ordered herein to be effective on or before June 1, 2009;
- 2. That Progress's request to recover costs associated with net metering through the REPS cost recovery rider is denied;
- 3. That Dominion shall file no later than May 1, 2009, revised Schedules 5P and 6P to comply with the prohibition against standby charges for net-metered customer-generators up to 20 kW for residential customers and 100 kW for non-residential customers; and
- 4. That Duke shall file a revised Rider SCG no later than June 1, 2009, that makes the rider available to customer-generators with capacity of up to 1 MW.

ISSUED BY ORDER OF THE COMMISSION.

This the 31st day of March, 2009.

NORTH CAROLINA UTILITIES COMMISSION

Patricia Swenson

Patricia Swenson, Deputy Clerk

Kc032409,01

Commissioners Robert V. Owens, Jr., and Lorinzo L. Joyner concur in part and dissent in part.

## DOCKET NO. E-100, SUB 83

COMMISSIONER ROBERT V. OWENS, JR., CONCURRING IN PART, DISSENTING IN PART: I concur with this Order with the exception of the majority's decision not to require the utilities to pursue a pilot study, as proposed by the Public Staff. The Commission should be mindful of the potential cost increases all customers will experience due to increased reliance on renewable resources. The study proposed by the Public Staff would have assisted the Commission in monitoring those cost impacts. Therefore, I dissent with the majority in its decision to forego the study.

\s\ Robert V. Owens, Jr.
Commissioner Robert V. Owens, Jr.

#### DOCKET NO. E-100, SUB 83

COMMISSIONER LORINZO L. JOYNER, CONCURRING IN PART, DISSENTING IN PART: I support the Commission's Order amending the net metering policy to allow larger generators to net meter. I believe that it is consistent with North Carolina energy policy as set forth in Senate Bill 3. I do not support the Majority's decision to forego an opportunity to obtain meaningful data on the issue of cross-subsidization because, in my view, it frustrates our ability to adequately assess the potential effects of allowing larger generators to net meter.

There is no serious dispute that allowing an expansion of net metering creates the potential for subsidies for those customer-generators. In its June 9, 2008 Order Establishing Procedural Schedule, the Commission acknowledged that cross-subsidization from non-participating customers to customer-generators was relevant in deciding whether expanding net metering to larger generators was in the public interest. Correctly recognizing that the existence of cross-subsidies, standing alone, was not determinative, the Commission directed the parties to address the nature and extent of that subsidization. Specifically, the parties were requested to address, *inter alia*, "quantification of the potential cross-subsidization under several scenarios."

Admittedly, the utilities' response to this particular issue was unhelpful for the reasons stated by the Majority. However, in the interest of haste, the Commission decided not to direct further study of the issue. The result is, in my view, less than satisfactory—it advances the meritorious public policy of strengthening the State's ability to meet more of its energy needs through renewables; however, it fails to require cost studies which would help answer the question: "At what cost?" Since increased reliance on renewable resources has the very real potential to increase costs to consumers, I do not think this failure was in the mid- to long-term interests of ratepayers.

The Majority correctly notes that cross-subsidies exist throughout utility tariffs in support of various State policies, and cites PEC's economic development (ED) rate as an example of a case where the Commission determined that certain policy benefits outweighed the cost of cross-subsidies. See Docket No. E-2, Sub 681 (1995). I believe the Commission reached the right result in that case. Its determination was informed by and based upon data the Company provided, including a rate impact analysis. The Company was required to demonstrate that ratepayer benefits resulting from the rider outweighed the short- and long-term resource acquisition costs caused by the ED rate and to identify its effect on the rates of other customers. It was this evidence that allowed the Commission to conclude that the policy benefits outweighed any cost of subsidies.

Former Commissioner Sam J. Ervin, IV, dissenting on procedural grounds in Docket No. E-2, Sub 681, described what should be the objective of Commission processes. "The procedures utilized by the Commission are, at bottom, intended to ensure that we have identified all questions which need to be resolved on the merits and that we possess sufficient information to decide the contested issues properly." I believe that the process employed in this case fell short of this objective. After identifying cross-subsidization as an important issue, the Commission failed to adopt a process that would have provided useful information to decide the issue on the merits. In a rising cost environment, caused in part by implementing Senate Bill 3, I do not believe that this failure was in the best interests of North Carolina ratepayers. I would have required the additional cost studies requested by the Public Staff.

\s\ Lorinzo L. Joyner
Commissioner Lorinzo L. Joyner

# Renewable Energy Facility Registrations Accepted by the North Carolina Utilities Commission (as of September 30, 2009)

Facility Name	Location	Primary Fuel	Size (kW)		
New Renewable Energy Facilities (G.S. 62-133.8(a)(5))					
Avalon Hydropower Project	NC	Hydroelectric	1,155		
Caroleen Mills Hydro	NC	Hydroelectric	1,500		
Cliffside Mills	NC	Hydroelectric	1,600		
Cox Lake Hydroelectric	NC	Hydroelectric	4,600		
Deep River Hydro	NC	Hydroelectric	400		
Haw River Hydro	NC	Hydroelectric	1,500		
High Falls Dam	NC	Hydroelectric	650		
High Shoals Hydroelectric	NC	Hydroelectric	1,800		
Inman Mills	SC	Hydroelectric	2,000		
L&S Water Power	NC	Hydroelectric	420		
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		
Piedmont	SC	Hydroelectric	1,000		
Rocky Mount Mill	NC	Hydroelectric	1,000		
Rocky River Hydroelectric	NC	Hydroelectric	235		
South Yadkin	NC	Hydroelectric	1,600		
Spray Cotton Mills Hydro	NC	Hydroelectric	500		
Upper Pelzer	SC	Hydroelectric	2,200		
Ward Mill Dam	NC	Hydroelectric	168		
Ware Shoals	SC	Hydroelectric	5,800		
1529 Properties	NC	Solar PV	50		
Blue Ridge Paper Solar	NC	Solar PV	800		
Deltec Homes	NC	Solar PV	55_		
Hamlin Family	NC	Solar PV	107		
Jim Barkley Toyota	NC	Solar PV	75		
MegaWatt Solar	NC	Solar PV	<u>50</u>		
PE Sutton Plant	NC	Solar PV	1,200		
Person County Solar Park	NC	Solar PV	500		
QVC Rocky Mount	NC	Solar PV	1,070		
SAS Solar	NC	Solar PV	1,000		
Wilson Community College	NC	Solar PV	16		
Biltmore Park Hilton	NC	Solar Thermal	0		
Fletcher Business Park	NC	Solar Thermal	0		
Kanuga Conferences, Inc	NC	Solar Thermal	0		

Facility Name	Location	Primary Fuel	Size (kW)		
New Renewable Energy Facilities (G.S. 62-133.8(a)(5))					
Proximity Hotel	NC	Solar Thermal	0		
SAS Building G	NC	Solar Thermal	0		
SAS Building T	NC	Solar Thermal	0		
YWCA Asheville	NC	Solar Thermal	0		
Camp Springs	TX	Wind	130,500		
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	ΤX	Wind	200,000		
Madison High School	NC	Wind	2		
Madison Middle School	NC	Wind	2		
Roscoe Wind Farm	TX	Wind	209,000		
Tatanka Wind Farm	ND/SD	Wind	180,000		
Charlotte Motor Speedway Landfill	NC	Landfill Gas	5,300		
Durham City Landfill Gas to Energy	NC	Landfill Gas	3,180		
Enoree Landfill	SC	Landfill Gas	3,200		
INGENCO	NC	Landfill Gas	4,000		
Iredell County Landfill	NC	Landfill Gas	4,500		
Orbit Energy Clinton Facility	NC	Swine waste	<u>1,628</u>		
Keil QF	NC	Biomass	2		
Hartsville Paper	SC	Biomass Cogen	50,000		
Craven County Wood	NC	Wood Biomass	45,000		
Coastal Carolina Clean Power	NC	Wood waste	32,000		
Renewable Energy Facilities (G.S. 62-133.8(a)(7))					
Bear Creek	NC	Hydroelectric	9,000		
Bryson	NC	Hydroelectric	1,000		
Capitola Hydroplant	NC	Hydroelectric	3,000		
Cedar Cliff .	NC	Hydroelectric	6,000		
Queens Creek	NC	Hydroelectric	1,000		
Tennessee Creek	NC	Hydroelectric	10,000		
Tuckasegee	NC	Hydroelectric	3,000		
Salem Energy Systems	NC	Landfill Gas	4,875		
Riegelwood Mill	NC	Biomass Cogen	60,000		