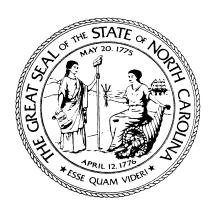
# ANNUAL REPORT REGARDING RENEWABLE ENERGY AND ENERGY EFFICIENCY PORTFOLIO STANDARD IN NORTH CAROLINA

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

DATE DUE: OCTOBER 1, 2014 SUBMITTED: OCTOBER 1, 2014

RECEIVED BY THE GOVERNOR OF NORTH CAROLINA THE ENVIRONMENTAL REVIEW COMMISSION AND THE JOINT LEGISLATIVE COMMISSION ON GOVERNMENTAL OPERATIONS



SUBMITTED BY THE NORTH CAROLINA UTILITIES COMMISSION

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# **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 by October 1 of each year to the Governor, the Environmental Review Commission, and the Joint Legislative Commission on Governmental Operations on the activities taken by the Commission to implement, and by electric power suppliers to comply with, the REPS requirement.

# 2013-14 Legislation

The 2013-14 General Assembly did not pass any legislation amending the REPS.

## **Commission Implementation**

## Rulemaking Proceeding

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

Since issuing this Order, the Commission has issued a number of orders interpreting various REPS provisions, including the following Orders issued since the 2013 report to the General Assembly:

On March 26, 2014, in Docket No. E-100, Sub 113, in response to a joint motion filed by numerous electric power suppliers, the Commission issued a Final Order Modifying the Poultry and Swine Waste Set-Aside Requirements and Providing Other Relief. The Order found that the electric power suppliers made a reasonable effort to comply with the swine waste and poultry waste set-aside REPS requirements in 2013, but will not be able to comply. The Order concluded that it was in the public interest to delay the implementation of the swine and poultry waste set-aside requirements by one year until 2014. The Order resulted in the following updated compliance schedules for the swine waste and poultry waste set-aside REPS requirements:

Calendar Year	Requirement for Swine Waste Resources
2014-2015	0.07%
2016-2018	0.14%
2019 and thereafter	0.20%

Calendar Year	Requirement for Poultry Waste Resources
2014	170,000 megawatt hours
2015	700,000 megawatt hours
2016 and thereafter	900,000 megawatt hours

On May 13, 2014, the Commission issued an Order Regarding Accounting Treatment for REC Sales. The Commission concluded that proceeds from REC sales should be credited to customers if the RECs were purchased with REPS rider proceeds, or if the RECs were produced via a generating facility that was paid for by customers. Further, the Commission determined that, because it cannot anticipate every scenario, it will review REC sales on a case-by-case basis in REPS rider proceedings and general rate cases, as the issues arise. The Commission further determined that the electric public utility will have the burden of proving that each REC sale was in the best interest of its customers and should file complete information regarding the original purchase price, resale price, the cost of replacement RECs and any incremental administrative costs or brokerage fees incurred pursuant to the transaction.

#### Renewable energy facilities

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

In its rulemaking proceeding, the Commission adopted rules providing for certification or report of proposed construction and registration of renewable energy facilities and new renewable energy facilities. As of September 1, 2013, the Commission has accepted registration statements filed by 938 facilities. A list of these facilities, along with other information, may be found on the Commission's website at: <u>http://www.ncuc.net/reps/reps.htm</u>.

The Commission has issued a number of orders since October 1, 2013, addressing issues related to the registration of a facility, including the following:

• On December 17, 2013, in Docket No. E-100, Sub 130, the Commission issued an Order Revoking Registration of Renewable Energy Facilities and New Renewable Energy Facilities. The Order revoked the registrations of 72 facilities registered as renewable

energy facilities or as new renewable energy facilities with the Commission. The owners of the 72 facilities listed in Appendices A and B of the Order did not complete their annual certifications on or before October 1, 2013, as required by the Commission's August 28, 2013 Order.

- On December 20, 2013, and May 5, 2014, respectively, in Docket Nos. SP-2422, Sub 1 and SP-2014, Sub 1, the Commission accepted/amended the registrations of a 1.9-MW<sub>AC</sub> Directed biogas-fueled combined heat and power (CHP) facility and a 1.6-MW<sub>AC</sub> biomass fueled CHP facility that would generate electricity through the pyrolysis of wood (the first of this type registered in the State). Both facilities were certified by the Secretary of State as being located in a "cleanfields renewable energy demonstration parks." The Commission accepted the registrations stating that all RECs derived from the facilities should be recorded by the NC-RETS Administrator as originating from the first 10 MW of generating capacity eligible for triple credit pursuant to S.L. 2010-195, as amended by S.L. 2011-279. The Commission noted in the May 5, 2014 Order that 6.5 MW of generating capacity remains that may be designated by the Commission as generating RECs to be marked as originating from the first 10 MW of generating capacity, and 10 MW of generating capacity remains that may be designated by the Commission as generating RECs to be marked as originating from the second 10 MW of generating capacity for triple credit pursuant to S.L. 2010-195, as amended by S.L. 2011-279.
- On September 9, 2014, the Commission issued an Order giving notice of its intent to revoke the registration of 191 renewable energy facilities and new renewable energy facilities because their owners had not completed or filed the annual certifications required each April 1, as detailed in Commission Rule R8-66(b) (11 facilities registered with NC-RETS did not complete the on-line form and 180 did not file a verified certification with the Commission). Facility owners were given until October 15, 2014, to file their annual certifications belatedly. Owners that do not complete the annual certifications face their facility's registrations being revoked pursuant to Commission Rule R8-66(f). The matter is still pending before the Commission.

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

Pursuant to G.S. 62-133.8(k), enacted in 2009, the Commission was required to develop, implement, and maintain an online REC tracking system no later than July 1, 2010, in order to verify the compliance of electric power suppliers with the REPS requirements.

On February 2, 2010, after evaluating the bids received in response to a request for proposals (RFP), the Commission signed a Memorandum of Agreement (MOA) with APX, Inc. (APX), to develop and administer an online REC tracking system for North Carolina, NC-RETS. APX successfully launched NC-RETS on July 1, 2010, and by letter dated September 3, 2010, the Commission accepted the system and authorized APX to begin billing users pursuant to the MOA. The original MOA with APX expired on December 31, 2013. Based on the feedback received from the stakeholders, the Commission extended the MOA with APX for an additional three years through 2016.

RECs have been successfully created by, and imported into, NC-RETS, and the electric power suppliers have used the system to demonstrate compliance with the 2010-2013 REPS solar set-aside requirements and the 2012-2013 REPS general requirements. Lastly, the Commission has established an on-going NC-RETS stakeholder group, providing a forum for resolution of issues and discussion of system improvements.

#### Environmental impacts

Pursuant to G.S. 62-133.8(j), the Commission was directed to consult with the North Carolina Department of Environment and Natural Resources (DENR) in preparing its report and to include any public comments received regarding direct, secondary, and cumulative environmental impacts of the implementation of the REPS requirements of Senate Bill 3. The Commission has not identified, nor has it received from the public or DENR, any public comments regarding direct, secondary, and cumulative environmental impacts of the implementation of the REPS provision of Senate Bill 3. DENR, in response to the Commission's request, noted the potential overlap of proposed U.S. Environmental Protection Agency (EPA) regulations with Senate Bill 3 resources. Specifically, DENR noted the growth of solar in North Carolina and highlighted potential sedimentation and erosion control issues associated with solar facilities. Regarding wind facilities, DENR noted concerns with the number of bird kills associated with wind turbines and the transient nature of wind energy. DENR also discussed biomass resources, noting the possibility of increased regulated pollutants from biomass resources in addition to increased GHG emissions. Finally, DENR noted the strides made in North Carolina in employing a diverse energy portfolio and its support for the use of clean, reliable energy sources.

## **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 (EE) and demand-side management (DSM) measures. In addition, as of 2010, each electric power supplier must meet a certain percentage of its retail electric sales with solar RECs from certain solar facilities. Finally, starting in 2012, each electric power supplier must meet a certain percentage of its retail electric sales from swine waste resources and a specified amount of electricity provided must be derived from poultry waste resources.

#### Monitoring compliance with REPS requirements

Monitoring by the Commission of compliance with the REPS requirements of Senate Bill 3 is accomplished through the annual filing by each electric power supplier of a REPS compliance plan and a 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 a 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 a REPS compliance report. The REPS compliance plan is a forward-looking forecast of an electric power supplier's REPS requirement and its plan for meeting that requirement. The REPS compliance report is an annual look back at the RECs earned or purchased and energy savings actually realized during the prior calendar year, and the electric power supplier's compliance in meeting its REPS requirement.

#### Cost recovery rider

G.S. 62-133.8(h) authorizes each electric power supplier to establish an annual rider up to an annual cap to recover the incremental costs incurred to comply with the REPS requirement and to fund certain research. Commission Rule R8-67(e) establishes a procedure under which the Commission will consider approval of a 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

#### Duke Energy Progress, Inc. (DEP)

On June 23, 2014, in Docket No. E-2, Sub 1043, DEP filed its 2013 REPS compliance report and application for approval of its 2013 REPS cost recovery rider pursuant to G.S. 62-133.8 and Rule R8-67. By its application and testimony,

DEP proposed to implement the following total REPS rates effective for service rendered on and after December 1, 2014: \$0.88 per month for residential customers; \$5.00 per month for general service/lighting customers; and \$17.92 per month for industrial customers - each of which is below the incremental per-account cost cap established in G.S. 62-133.8(h). DEP's proposed new REPS rider, if approved, will increase the current REPS rates (excluding gross receipts taxes and regulatory fee) by \$0.69 per month for residential customers; decrease the rate by \$2.83 per month for general service/lighting customers; and decrease the rate by \$11.70 per month for industrial customers. In its 2013 REPS compliance report, DEP indicated that it acquired sufficient RECs to meet the 2013 requirement of 3% of its 2012 retail sales (1,103,531 RECs representing 3% of combined 2012 retail sales of 36,784,274 MWh.) Additionally, DEP indicated that it acquired sufficient solar RECs to meet the 2013 requirement of 0.07% of its 2012 retail sales (33,070 RECs.) Pursuant to the Commission's March 26, 2014 Order in Docket No. E-100, Sub 113, DEP's 2013 swine waste and poultry waste set-aside requirements were delayed until 2014. A hearing was held on DEP's 2013 REPS compliance report and 2014 REPS cost recovery rider on September 16, 2014. A final decision is pending before the Commission.

On September 2, 2014, in Docket No. E-100, Sub 141, DEP filed its 2014 REPS compliance plan as part of its 2014 Integrated Resource Plan (IRP). In its plan, DEP indicated that its overall compliance strategy to meet the REPS requirements consisted of the following key components: (1) energy efficient programs that will generate savings that can be counted towards obligation requirements; (2) purchases of RECs; and (3) research studies to enhance its ability to comply in future years. DEP 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, Winterville, and the city of Waynesville. DEP intends to achieve compliance with the solar set-aside requirements through the execution of a number of solar contracts as well as commercial and residential solar photovoltaic (PV) programs. DEP's primary strategy for compliance with the swine waste set-aside requirement was to jointly procure energy derived from swine waste resources with DEP and other electric power suppliers. On August 28, 2014, in Docket No. E-100, Sub 113, DEP, along with several other parties, filed a motion to delay the 2014 swine waste set-aside requirement. DEP stated in its 2014 compliance plan that due to diligent effort it has secured enough RECs to comply with its 2014 poultry waste set-aside requirement. DEP noted several resource options available to the Company to meet its general requirement. DEP stated that it intends to meet 25% (the maximum allowable under the REPS) of its requirement through its energy efficiency programs. DEP stated that it intends to meet portions of its general requirement through a variety of biomass, wind and solar resources.

#### Duke Energy Carolinas, LLC (DEC)

On March 5, 2014, in Docket No. E-7, Sub 1052, DEC filed its 2013 REPS compliance report and an application for approval of a REPS rider to be effective September 1, 2013. The application requested a REPS rider of \$0.40 per month for residential customers; \$1.25 per month for general customers (the DEC equivalent of commercial class customers); and \$5.30 per month for industrial customers - each of which is below the incremental per-account cost cap established in G.S. 62-133.8(h). In its 2013 REPS compliance report, DEC indicated that it acquired sufficient RECs to meet the 2013 requirement of 3% of its 2012 retail sales (1,737,757 RECs representing 3% of combined 2012 retail sales of 57,925,034 MWh). Additionally, DEP indicated that it acquired sufficient solar RECs to meet the 2012 requirement of 0.07% of its 2012 retail sales (51,464 RECs). Pursuant to the Commission's December 20, 2013 Notice of Decision (affirmed by the March 26, 2014 Order) in Docket No. E-100, Sub 113, DEC's 2013 swine and poultry waste set-aside requirements were delayed until 2014. A hearing was held on DEC's 2013 compliance report and 2014 REPS cost recovery rider on June 3, 2014. On August 21, 2014, the Commission issued an order approving a REPS rider of \$0.39 per month for residential customers (increased from -\$0.01 the previous year); \$1.22 per month for general service accounts (decreased from \$3.14 the previous year); and \$5.11 per month for industrial customers (decreased from \$10.73 the previous year) - each of which is below the incremental per-account cost cap established in G.S. 62-133.8(h).

On September 2, 2014, in Docket No. E-100, Sub 141, DEC filed its 2014 REPS compliance plan as part of its 2014 Integrated Resource Plan (IRP). In its plan, DEC indicated that its overall compliance strategy to meet the REPS requirements consisted of the following key components: (1) energy efficient programs that will generate savings that can be counted towards obligation requirements; (2) purchases of RECs; and (3) research studies to enhance its ability to comply in future years. DEC has agreed to provide REPS compliance services for the following wholesale customers, as allowed under G.S. 62-133.8(c)(2)(e): Rutherford Electric Membership Corporation, Blue Ridge Electric Membership Corporation, City of Dallas, Forest City, City of Concord, Town of Highlands, and the City of Kings Mountain.

DEC intends to achieve compliance with the solar set-aside requirements through the execution of a number of solar contracts as well as commercial and residential solar PV programs. DEC's primary strategy for compliance with the swine waste set-aside requirement was to purchase bundled energy derived from swine waste resources. On August 28, 2014, in Docket No. E-100, Sub 113, DEC, along with several other parties, filed a motion to delay the 2014 swine waste set-aside requirement. DEC stated in its 2014 compliance plan that due to diligent effort it has secured enough RECs to comply with its 2014 poultry waste set-aside requirement. DEC noted several resource options available to the Company to meet its general requirement. DEC stated that it intends to meet 25% (the maximum allowable under the REPS) of its requirement through its energy efficiency programs. DEC stated that it intends to meet portions of its general requirement through a variety of biomass, wind and solar resources.

#### Dominion North Carolina Power (Dominion)

On December 18, 2013, the Commission issued an Order Approving REPS and REPS EMF Riders and 2012 Compliance. The Order approved the following total 2013 REPS riders: \$0.37 per month for residential customers; \$5.33 per month for general service/lighting customers; and \$35.93 per month for industrial customers. In addition, the Order approved Dominion's 2012 compliance report and retired the RECs associated with that account.

On August 28, 2014, in Docket No. E-22, Sub 514, Dominion filed an application for approval of a 2014 REPS recovery rider and its 2013 compliance report. The report included compliance status for the Town of Windsor. Dominion stated that it met its 2013 general REPS requirement (120,557 RECs) by purchasing unbundled out-of-state solar and wind RECs and through energy efficiency measures and the Town of Windsor's requirement (1,385 RECs) with additional solar and biomass RECs from within the State. Dominion stated that it met is 2013 solar set-aside requirement (2,881 RECs) and the Town of Windsor's requirement (34 RECs) by purchasing solar RECs. Dominion has requested approval of two riders, an RPE rider to recover historical compliance costs, and an RP Rider to recover future projected 2014 compliance costs. The total of the requested riders is \$0.69 for residential accounts, \$3.04 for commercial accounts, and \$20.65 for industrial accounts. A hearing has been scheduled by the Commission for November 12, 2014, to consider Dominion's REPS Rider request and its 2013 compliance report.

On August 29, 2014, in Docket No. E-100, Sub 143, Dominion filed its 2014 REPS compliance plan as part of its 2014 IRP. In its plan, Dominion stated that it intends to meet its general REPS requirements in 2014 through 2016 through the use of new company-generated renewable energy where economically feasible, EE, and REC purchases. Dominion stated that it has contracted for enough solar RECs to satisfy its solar set-aside requirement in 2014 and 35% of its 2015 and 2016 requirement. Dominion is participating with other electric power suppliers to evaluate proposals from swine and poultry waste energy suppliers to meet the swine waste and poultry waste set-aside requirements. Dominion stated it has entered into three contracts for poultry RECs and will be able to meet 25% of the Town of Windsor's requirement through these contracts. On August 28, 2014, in Docket No. E-100, Sub 113, Dominion, along with several other parties, filed a motion to delay the 2014 swine waste set-aside requirement.

#### EMCs and municipally-owned electric utilities

There are thirty-one EMCs serving customers in North Carolina, including twenty-six that are headquartered in the state. Twenty-five of the EMCs are members of North Carolina EMC (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 municipal and university-owned electric distribution systems serving customers in North Carolina. Fifty-one of the North Carolina municipalities are participants in either North Carolina Eastern Municipal Power Agency (NCEMPA), or North Carolina Municipal Power Agency Number 1 (NCMPA1), municipal power agencies that provide wholesale power to their members. The remaining municipally-owned electric utilities purchase their electric power from wholesale electric suppliers.

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

#### GreenCo Solutions, Inc. (GreenCo)

On September 2, 2014, in Docket No. E-100, Sub 143, GreenCo filed its 2013 REPS compliance report and its 2014 compliance plan with the Commission on behalf of its member EMCs, as well as Mecklenburg Electric Cooperative, Broad River Electric Cooperative, and the Town of Oak City. In its plan, GreenCo stated that it intended to use its members' allocations from SEPA, RECs purchased from both in-State and out-of-state renewable energy facilities, and EE savings from eleven approved EE programs to meet its members' REPS requirements. GreenCo anticipates compliance in 2014 with the poultry waste set-aside requirements. In its 2013 REPS compliance report, GreenCo stated that it secured adequate resources to meet its members' solar set-aside requirement for 2013 (8,411 RECs for GreenCo, 2 RECs for Mecklenburg, and 4 RECs for Broad River). GreenCo also stated that it secured adequate resources to meet its members' general REPS requirement for 2012 (360,465 RECs for GreenCo, 44 RECs for Mecklenburg, and 157 RECs for Broad River). Lastly, for 2013, the REPS incremental costs incurred by GreenCo's members were less (around one-fifth) of the costs allowed under the per-account cost cap in G.S. 62-133.8(h). On August 28, 2014, in Docket No. E-100, Sub 113, GreenCo, along with several other parties, filed a motion to delay the 2014 swine waste set-aside requirement.

#### EnergyUnited Electric Membership Corporation (EnergyUnited)

On August 28, 2014, in Docket No. E-100, Sub 143, EnergyUnited filed its 2014 REPS compliance plan and its 2013 REPS compliance report with the Commission. In its report, EnergyUnited stated that it met its 2013 general REPS requirement (69,131 RECs) through its SEPA allocations, EE programs, and the purchase of RECs. EnergyUnited stated that it met its solar set-aside

requirement by purchasing 1,614 solar RECs. In its 2013 compliance plan, EnergyUnited stated that it plans to fulfill its general REPS requirement in 2014 and beyond. On August 28, 2014, in Docket No. E-100, Sub 113, EnergyUnited, along with several other parties, filed a motion to delay the 2014 swine waste set-aside requirement.

#### Tennessee Valley Authority (TVA)

On September 2, 2014, in Docket No. E-100, Sub 143, TVA filed its 2014 REPS compliance plan and 2013 REPS compliance report with the Commission. In its plan, TVA indicated its intent to fulfill the general REPS requirement in 2014 through 2016 with its SEPA allocations, purchase of out-of-state wind RECs, and the purchases of various in-State RECs. With regard to its cooperatives' solar set-aside requirement in years 2014 through 2016, TVA reiterated its plans to meet the requirement by generating the energy at its own facilities. In its report TVA stated it had satisfied its cooperatives' 2013 general REPS requirement with its SEPA allocations, purchase of out-of-state wind RECs, and the purchases of various in-State RECs and had satisfied its cooperatives' 2012 solar set-aside requirement through the generation of solar energy. TVA stated in its 2013 compliance report that it had used biomass RECs and solar energy production to comply with its 2013 requirements. TVA noted that it was relieved of its 2013 swine and poultry waste set-aside requirements. TVA stated that had no incremental costs of compliance (TVA's estimated cost cap is \$1,664,610). On August 28, 2014, in Docket No. E-100, Sub 113, TVA, along with several other parties, filed a motion to delay the 2014 swine waste set-aside requirement.

#### Halifax Electric Membership Corporation (Halifax)

On September 2, 2014, in Docket No. E-100, Sub 143, Halifax filed its 2014 REPS compliance plan and its 2013 REPS compliance report with the Commission. In its compliance plan, Halifax stated that it intends to meet its REPS requirements with a combination of SEPA allocations, EE programs, various RECs, and additional resources to be determined on an ongoing basis. Halifax noted concerns regarding the addition of industrial customers and its cost cap in future years. According to its 2013 compliance report, Halifax met its 2013 general REPS requirement utilizing its SEPA allocations, various EE programs, and REC purchases. With regard to its 2013 solar set-aside requirement, Halifax met the requirement by generating solar energy and purchasing solar RECs. On August 28, 2014, in Docket No. E-100, Sub 113, Halifax, along with several other parties, filed a motion to delay the 2014 swine waste set-aside requirement.

#### North Carolina Eastern Municipal Power Agency (NCEMPA)

On August 29, 2014, in Docket No. E-100, Sub 143, NCEMPA filed with the Commission, on behalf of its members, a 2014 REPS compliance plan and

2013 REPS compliance report. In its 2014 compliance plan, NCEMPA stated that its members would meet their REPS requirements by purchasing RECs, as well as utilizing SEPA allocations and EE programs. NCEMPA stated that it had entered into contracts to purchase various types of RECs and will continue to investigate the market for unbundled RECs. In its compliance report, NCEMPA stated that it met its 2013 general REPS requirement (206,389 RECs) through the purchase of bundled renewable energy and the purchase of solar, biomass, and wind RECs. Additionally, NCEMPA stated in its report that it met its 2013 solar set-aside requirement (4,816 RECs) by purchasing solar RECs. In its compliance plan, NCEMPA stated that it has entered into contracts for enough RECs to satisfy the solar set-aside requirement through 2016. NCEMPA stated in its report that its 2013 incremental costs were about one-sixth of the per-account cost cap and estimated in its compliance plan that the incremental costs for REPS compliance will be significantly less than its per-account cost cap in 2014 through 2016. NCEMPA indicated in its compliance plan that fulfillment of it 2014 poultry waste set-aside requirement is uncertain at this time. On August 28, 2014, in Docket No. E-100, Sub 113, NCEMPA, along with several other parties, filed a motion to delay the 2014 swine waste set-aside requirement.

#### North Carolina Municipal Power Agency No. 1 (NCMPA1)

On August 29, 2014, in Docket No. E-100, Sub 143, NCMPA1 filed with the Commission, on behalf of its members, a 2014 REPS compliance plan and 2013 REPS compliance report. In its 2014 compliance plan, NCMPA1 stated that its members would meet their REPS requirements by purchasing RECs, as well as utilizing SEPA allocations and EE programs. NCMPA1 stated that it had entered into contracts to purchase various types of RECs and would continue to investigate the market for unbundled RECs as a cost-effective means of REPS compliance. In its compliance report, NCMPA1 stated that it met its 2013 general REPS requirement (145,213 RECs) by purchasing renewable energy and through the purchase of solar, biomass, and wind RECs. Additionally, NCMPA1 stated in its report that it met its 2013 solar set-aside requirement (3,389 RECs) by purchasing electricity from solar generating facilities and through the purchase of solar RECs. In its compliance plan, NCMPA1 stated that it had entered into contracts for enough RECs to satisfy the solar set-aside requirement through 2016. NCMPA1 stated in its report that its 2013 incremental costs were about one-sixth of the per-account cost cap and estimated in its compliance plan that the incremental costs for REPS compliance will be significantly less than its per-account cost cap in 2014 through 2016. NCMPA1 indicated in its compliance plan that fulfillment of it 2014 poultry waste set-aside requirement is uncertain at this time. On August 28, 2014, in Docket No. E-100, Sub 113, NCMPA1, along with several other parties, filed a motion to delay the 2014 swine waste set-aside requirement.

#### Fayetteville Public Works Commission (FPWC)

On August 28, 2014, in Docket No. E-100, Sub 143, FPWC filed its 2013 compliance report and 2014 compliance plan. In its 2014 compliance plan, FPWC stated that it intended to meet its REPS requirements by purchasing RECs, as well as utilizing SEPA allocations and EE programs. In its compliance report, FPWC stated that it met its 2013 general REPS requirement (60,224 RECs) through the purchase of in-State and out-of-state RECs. Additionally, FPWC stated that it met its solar set-aside requirement through the purchase of 1,405 solar RECs. Finally, FPWC stated that its incremental costs for REPS compliance are projected to be less than its per-account cost cap in 2014 through 2016. On August 28, 2014, in Docket No. E-100, Sub 113, FPWC, along with several other parties, filed a motion to delay the 2014 swine waste set-aside requirement.

#### Town of Fountain (Fountain)

On August 28, 2014, in Docket No. E-100, Sub 143, Fountain filed its 2014 compliance plan and 2013 compliance report. Fountain noted in its compliance plan that compliance for 2014 through 2016 would be satisfied through the purchase of RECs. In its compliance report, Fountain stated that its 2013 general REPS requirement was 101 RECs and its solar set-aside requirement was 3 solar RECs, both of which were satisfied through the purchase of RECs. Further, Fountain noted that its incremental costs were about one-third of the allowed per-account cost cap.

#### Wholesale Providers Meeting REPS Requirements

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

## Recommendation

The Commission recommends that G.S. 62-300 be amended to add a \$25.00 filing fee for applications for registration of renewable energy facilities. The Commission has received more than 4,000 reports of proposed construction and registration applications since the implementation of Senate Bill 3. A reasonable fee for registration applications will help defray the cost of processing the applications and issuing orders of registration.

## Conclusions

All of the electric power suppliers have met or appear to have met the 2012 and 2013, and appear on track to meet the 2014, general REPS requirements. All of the electric power suppliers have met the 2012, and appear to have met the 2013, solar set-aside requirement of Senate Bill 3. A joint motion to delay implementation of the 2013 swine and poultry waste set-aside requirements was granted, in part, delaying implementation of those sections of the REPS by one additional year. Despite this action, most electric power suppliers do not appear on track to meet the swine waste set-aside for 2014 and have requested a further delay to this requirement. In addition, as stated in the 2013 Report and as highlighted again in this report, numerous issues continue to arise in the implementation of Senate Bill 3 that have required interpretation by the Commission of the statutory language: e.g., the definition of new renewable energy facility, the electric power suppliers' requirements under the set-aside provisions, the eligibility of renewable energy facilities and resources to meet the set-aside provisions, etc. If the plain language of the statute was ambiguous, the Commission attempted to discern the intent of the General Assembly in reaching its decision on the proper interpretation of the statute.

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

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

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

On October 1, 2008, the Commission made its first annual report pursuant to G.S. 62-133.8(j),<sup>2</sup> and last year, on October 1, 2013, the Commission made its sixth annual report.<sup>3</sup> The remaining sections of this report detail, as required by the General Assembly, developments related to Senate Bill 3, activities undertaken by the Commission during the past year to implement Senate Bill 3, and actions by the electric power suppliers to comply with G.S. 62-133.8, the REPS provisions of Senate Bill 3.

<sup>&</sup>lt;sup>1</sup> G.S. 62-133.8(j) was amended by Session Law 2011-291 to require that the annual REPS Report be submitted to the Joint Legislative Commission on Governmental Operations, rather than the Joint Legislative Utility Review Committee.

<sup>&</sup>lt;sup>2</sup> Annual Report of the North Carolina Utilities Commission to the Governor of North Carolina, the Environmental Review Commission and the Joint Legislative Utility Review Committee Regarding Energy and EE Portfolio Standard, October 1, 2008 (2008 REPS Report).

<sup>&</sup>lt;sup>3</sup> Annual Report of the North Carolina Utilities Commission to the Governor of North Carolina, the Environmental Review Commission and the Joint Legislative Utility Review Committee Regarding Energy and EE Portfolio Standard, October 1, 2013 (2013 REPS Report).

# 2013-14 LEGISLATION

The 2013-14 General Assembly did not pass any legislation amending the REPS. Summaries of REPS related legislation from previous sessions of the General Assembly are available in previous reports.

# **COMMISSION IMPLEMENTATION**

# **Rulemaking Proceeding**

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

In its 2013 REPS Report, the Commission noted that it had issued a number of orders interpreting various provisions of Senate Bill 3, in which it made the following conclusions:

- Tennessee Valley Authority's (TVA) distributors making retail sales in North Carolina and electric membership corporations (EMCs) headquartered outside of North Carolina that serve retail electric customers within the State must comply with the REPS requirement of Senate Bill 3, but the university-owned electric suppliers, Western Carolina University and New River Light & Power Company, are not subject to the REPS requirement.
- Each electric power supplier's REPS requirement, both the set-aside requirements and the overall REPS requirements, should be based on its prior year's actual North Carolina retail sales.
- An electric public utility cannot use existing utility-owned hydroelectric generation for REPS compliance, but may use power generated from new small (10 MW or less) increments of utility-owned hydroelectric generating capacity.

- The solar, swine waste and poultry waste set-aside requirements should have priority over the general REPS requirement where both cannot be met without exceeding the per-account cost cap established in G.S. 62-133.8(h).
- The set-aside requirements may be met through the generation of power, purchase of power, or purchase of unbundled renewable energy credits (RECs).
- The 25% limitation on the use of out-of-state RECs applies to the general REPS requirement and each of the individual set-aside provisions.
- The electric power suppliers are charged with collectively meeting the aggregate swine waste and poultry waste set-aside requirements and may agree among themselves how to collectively satisfy those requirements.
- RECs associated with the electric power generated at a biomass-fueled combined heat and power (CHP) facility located in South Carolina and purchased by an electric public utility in North Carolina would be considered as in-State pursuant to G.S. 62-133.8(b)(2)(d), RECs associated with but out-of-state renewable generation not delivered to and purchased by an electric public utility in North Carolina and RECs associated with out-of-state thermal energy would not be considered to be in-State RECs pursuant to G.S. 62-133.8(b)(2)(d).
- Only RECs associated with the percentage of electric generation that results from methane gas that was actually produced by poultry waste or swine waste may be credited toward meeting the swine waste and poultry waste set-aside requirements. Thus, not all of the methane gas produced by the anaerobic digestion of swine or poultry waste, as well as "other organic biodegradable material," would qualify toward the set-aside requirements because the other material described as mixed with the poultry waste or swine waste is responsible for some percentage of the resulting methane gas.
- In response to a Joint Motion filed by Duke Energy Progress, Inc. (DEP), Duke Energy Carolinas, LLC (Duke), Dominion North Carolina Power (Dominion), North Carolina EMC (NCEMC), North Carolina Eastern Municipal Power Agency (NCEMPA), and North Carolina Municipal Power Agency Number 1 (NCMPA1) (jointly, the Electric Suppliers), in Docket No. E-100, Sub 113, the Commission concluded that issuance of a joint request for proposals (RFP) by the Electric

Suppliers is a reasonable means for the Electric Suppliers to work together collectively to meet the swine waste set-aside requirement.

- In response to a motion filed in Docket No. E-100, Sub 113, by DEP on behalf of Dominion, Duke, NCEMC, GreenCo Solutions, Inc., North Carolina Sustainable Energy Association (NCSEA), North Carolina Pork Council, Fibrowatt LLC, Green Energy Solutions NV, Inc., Attorney General and Public Staff, the Commission approved a Pro Rata Mechanism (PRM) as a reasonable and appropriate means for the State's electric power suppliers to meet the aggregate swine waste and poultry waste set-aside requirements of G.S. 62-133.8(e) and (f). As it had earlier done with regard to the aggregate swine waste set-aside requirement, the Commission approved the ioint procurement of RECs from energy produced by poultry waste, the sharing of poultry waste generation bids among electric suppliers, and other collaborative efforts proposed by DEP, Dominion, NCEMC, NCEMPA, NCMPA1, EnergyUnited EMC (EnergyUnited), Halifax EMC (Halifax), GreenCo Solutions, Inc. (GreenCo), and the Fayetteville Public Works Commission (FPWC) as a reasonable means for the State's electric suppliers to work together to meet the poultry waste set-aside requirement.
- The Commission found that the term "allocations made by the Southeastern Power Administration" (SEPA), is used as a term of art in G.S. 62-133.8(c)(2)(c). The Commission, therefore, concluded that a municipal electric power supplier or EMC will be permitted to use the total annual amount of energy supplied by SEPA to that municipality or EMC to comply with its respective REPS requirement, subject to the 30% limitation provided in G.S. 62-133.8(c)(2)(c).
- In response to a petition filed by Peregrine Biomass Development Company, LLC (Peregrine), in Docket No. E-100, Sub 113, requesting that the Commission exercise its discretionary authority pursuant to G.S. 62-133.8(i)(2) (the off-ramp) to allow RECs associated with the thermal energy output of a CHP facility which uses poultry waste as a fuel to meet the poultry waste set-aside requirement under G.S. 62-133.8(f) the Commission issued an Order on October 8, 2010. The Order denied Peregrine's request to allow RECs associated with the thermal heat output of a CHP facility that uses poultry waste as fuel to meet the poultry waste set-aside requirement. The Commission reasoned that the legislature's inclusion of the phrases "or an equivalent amount of energy" and "new metered solar thermal energy facilities" in subsection (d), coupled with the lack of similar express language in subsection (f), demonstrated a clear legislative intent to allow solar thermal RECs to meet the solar set-aside requirement, but not to allow thermal RECs to meet the poultry waste set-aside

requirement. In response to a motion filed on September 14, 2010, in Docket No. E-100, Sub 113, by DEP, Duke, Dominion, NCEMC, NCEMPA, NCMPA1 and GreenCo, the Commission issued an Order on November 23, 2010, holding that an electric public utility can recover through its fuel cost rider the total delivered cost of the purchase of energy generated by a swine or poultry waste-to-energy facility where the RECs associated with the production of the energy are purchased by another North Carolina electric power supplier to comply with the REPS statewide aggregate swine waste and poultry waste set-aside requirements.

- On January 31, 2011, the Commission issued an Order amending Rules R8-64 through R8-69, adopting final NC-RETS Operating Procedures, and approving an application form for use by owners of renewable energy facilities in obtaining registration of a facility under Rule R8-66. The amendments to Rules R8-64 through R8-69 clarify and streamline the application procedures, registration, record keeping, and other requirements for renewable energy facilities.
- On May 14, 2012, the Commission issued an Order in Docket No. E-100, Sub 113, revising Commission Rules R8-67(b), R8-67(c), and R8-67(h). The amendment added a requirement that REPS compliance plans contain a list of planned and implemented demand-side management (DSM) measures and include a measurement and verification (M&V) plan if one is not already filed with the Commission. Additionally, the amendment added reporting requirements to the REPS Compliance Reports for EMCs regarding EE and implementation of M&V plans. The Order also required all electric power suppliers to review the number of energy efficiency (EE) certificates they have reported to date and submit any changes necessitated by the Order.
- On July 30, 2012, the Commission issued an Order in Docket No. E-100, Sub 134, amending Commission Rules R8-61, R8-63, and R8-64. The amendments added to the previously existing requirement that an application for a certificate of public convenience and necessity (CPCN) contain a map and location of the facility. The amendments require additional information including: 1) the proposed site layout relative to the map; 2) all major equipment, including the generator, fuel handling equipment, plant distribution system, and start up equipment; 3) the site boundary; 4) planned and existing pipelines, planned and existing roads, planned and existing water supplies, and planned and existing electric facilities.
- On November 29, 2012, in Docket No. E-100, Sub 113, the Commission issued an Order Modifying the Poultry and Swine Waste

Set-Aside Requirements and Granting Other Relief. The Order found that the Electric Power Suppliers made a reasonable effort to comply with the swine waste and poultry waste set-aside REPS requirements in 2012, but will not be able to comply. Among the reasons, the Commission found that the technology is in early stages of development, the REPS requirements have been modified; and that disagreements between developers and the Electric Power Suppliers have delayed contracts. The Order concluded that it was in the public interest to eliminate the swine waste set-aside requirement in 2012, and to delay the implementation of the poultry waste set-aside requirement by one year until 2013. Additionally, the Order concluded that as aggregate requirements with the majority of the electric power suppliers in non-compliance it was appropriate to apply the delays to all electric power suppliers and to allow those who could have complied to bank their RECs for future compliance purposes.

In addition to modifying the compliance schedules for the swine waste and poultry waste set-aside REPS requirements, the Order also required that Duke and DEP file tri-annual progress reports on their compliance with, and efforts to comply with, the swine waste and poultry waste set-aside requirements. Finally, the Order required that Duke and DEP create a web based Information Sheet designed to provide developers relevant information regarding the provision and sale of electricity from swine or poultry waste-to-energy facilities.

Since the October 1, 2013 report was finalized, the Commission has issued a number of additional Orders interpreting various provisions of Senate Bill 3 and seeking additional information to aid the Commission in future interpretations. The following Orders are of particular interest.

# *Final Order Modifying the Poultry and Swine Waste Set-Aside Requirements and Providing Other Relief, Docket No. E-100, Sub 113 (March 26, 2014).*

On September 16, 2013, DEP, Duke, DEP, Dominion, GreenCo, FPWC, EnergyUnited, Halifax, TVA, and on September 20, 2013, NCEMPA, and NCMPA1 filed a motions to modify and delay the swine waste and poultry waste set-aside requirements in G.S. 62-133.8(e) and (f) (hereinafter all referenced collectively as Petitioners). The motions stated that, despite the Petitioners best efforts, the aggregate requirements of the poultry waste and swine waste set-asides cannot be achieved in 2013. The Petitioners requested that the Commission issue an Order that delayed the Petitioners need to comply with the swine waste and poultry waste set-asides, as modified by the Commission's 2012 Delay Order, by one year. On September 23, 2013, the Commission issued an Order scheduling a hearing on the matter, requesting testimony from the petitioners to support their position and answer the Commission's questions

provided in the Order, and allowing intervenors to file testimony. The Commission received testimony and rebuttal testimony from several other parties and intervenors. A hearing was held by the Commission on November 5, 2013.

On December 20, 2013, the Commission issued a Notice of Decision and Order stating that, due to the timing of the motions, it was not possible for the Commission to develop its complete order before the end of 2013, but that the Commission had made its decision in the docket. The Notice of Decision provided notice that the Commission would issue an order (1) delaying the 2013 requirements of G.S. 62-133.8(e) and (f), as established in the 2012 Delay Order, for one year; (2) requesting that the Public Staff arrange and facilitate two stakeholder meetings a year during 2014 and 2015; and (3) applying the triannual filing requirement first required by the 2012 Delay Order to DNCP, GreenCo, Fayetteville, EnergyUnited, Halifax, NCEMPA and NCMPA1.

On March 26, 2014, in Docket No. E-100, Sub 113, the Commission issued a Final Order Modifying the Poultry and Swine Waste Set-Aside Requirements and Providing Other Relief. The Commission's Order was based on the evidence and testimony of the Petitioners; the North Carolina Pork Council; the North Carolina Poultry Federation; and the Public Staff. The Order found that the Petitioners made a reasonable effort to comply with the swine waste and poultry waste set-aside REPS requirements in 2013, but will not be able to comply. Among the reasons the Petitioners would not be able to comply, the Commission found that the technology is in early stages of development and that the REPS requirements have been modified. The Order concluded that it was in the public interest to delay the implementation of the swine and poultry waste set-aside requirements by one year until 2014. Additionally, the Order concluded that as aggregate requirements with the majority of the electric power suppliers in non-compliance it was appropriate to apply the delays to all electric power suppliers and to allow those who could have complied to bank their RECs for future compliance purposes. Finally, the Order concluded that the triannual progress reporting requirement established in the Commission's 2012 Delay Order should also apply to Dominion, GreenCo, FPWC, EnergyUnited, Halifax, NCEMPA and NCMPA1.

The March 26, 2014 Order resulted in the following updated compliance schedules for the swine waste and poultry waste set-aside REPS requirements:

<u>Calendar Year</u>	Requirement for Swine Waste Resources
2014-2015	0.07%
2016-2018	0.14%
2019 and thereafter	0.20%

<u>Calendar Year</u>	Requirement for Poultry Waste Resources
2014	170,000 megawatt hours
2015	700,000 megawatt hours
2016 and thereafter	900,000 megawatt hours

On September 28, 2014, in Docket No. E-100, Sub 113, DEP, Duke, Dominion, GreenCo, FPWC, EnergyUnited, Halifax, TVA, NCMPA1 and NCEMPA filed a motion to delay the 2014 swine waste set-aside. The motion did not request that the poultry waste set-aside also be delayed; indicating that the electric power suppliers may be in a position to comply with that requirement for the first time. The matter is still pending before the Commission.

# Order Regarding Accounting Treatment for REC Sales, Docket No. E-100, Sub 113 (May 13, 2014).

On September 17, 2012, the Commission issued an Order Requesting Comments Regarding Accounting Treatment for Transfers of [RECs]. The Commission asked parties to address the following questions:

- 1. How the gain that an electric power supplier receives from a REC sale should be treated for ratemaking purposes;
- 2. How the RECs to be sold should be selected;
- 3. How the sales price for RECs should be established; and
- 4. How the original purchase price of such RECs should be recorded.

Several utilities and other parties filed comments with the Commission.

On May 13, 2014 the Commission issued an Order Regarding Accounting Treatment for REC Sales. The Commission concluded that proceeds from REC sales should be credited to customers if the RECs were purchased with REPS rider proceeds, or if the RECs were produced via a generating facility that was paid for by customers. Further, the Commission determined that, since it cannot anticipate every scenario, it will review REC sales on a case-by-case basis in REPS rider proceedings and general rate cases, as the issues arise. The Commission further determined that the electric public utility will have the burden of proving that each REC sale was in the best interest of its customers and should file complete information regarding the original purchase price, resale price, the cost of replacement RECs and any incremental administrative costs or brokerage fees incurred pursuant to the transaction.

## **Renewable Energy Facilities**

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

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

To ensure that each renewable energy facility from which electric power or RECs are used for REPS compliance meets the particular requirements of Senate Bill 3, the Commission adopted Rule R8-66 to require that the owner, including an electric power supplier, of each renewable energy facility or new renewable energy facility register with the Commission if it intends for RECs it earns to be eligible for use by an electric power supplier for REPS compliance. This registration requirement applies to both in-State and out-of-state facilities. As of September 1, 2014, the Commission has accepted registration statements filed by 1,041 facilities.

As detailed in the 2013 REPS Report, the Commission has issued a number of orders addressing issues related to the registration of a facility, including the definition of "renewable energy resource," as summarized below.

- Accepted registration as a new renewable energy facility a 1.6-MW electric generating facility to be located near Clinton in Sampson County, North Carolina, and fueled by methane gas produced from anaerobic digestion of organic wastes from a Sampson County pork packaging facility and from a local swine farm.
- Issued a declaratory ruling that: (1) the percentage of refuse-derived fuel (RDF) that is determined by testing to be biomass, and the synthesis gas (Syngas) produced from that RDF is a "renewable energy resource" as defined in G.S. 62-133.8(a)(8); (2) the applicant's delivery of Syngas from a co-located gasifier to an electric utility boiler would not make the company a "public utility" as defined in G.S. 62-3(23); and (3) the applicant's construction of a co-located gasifier and the piping connection from the gasifier to an existing electric utility boiler would not require a CPCN under G.S. 62-110(a) or under G.S. 62-110.1(a).
- Issued an Order amending existing CPCNs for two electric generating facilities in Southport and Roxboro, North Carolina, that were being converted to burn a fuel mix of coal, wood waste, and tire-derived fuel

(TDF). The Commission concluded that the portion of TDF derived from natural rubber, an organic material, meets the definition of biomass, and is eligible to earn RECs, but required the applicant to submit additional information to demonstrate the percentage of TDF that is derived from natural rubber. In addition, the Commission accepted registration of the two facilities as new renewable energy facilities.

- Accepted registration as a new renewable energy facility a 1.6-MW CHP facility to be located in Darlington County, South Carolina, that will generate electricity using methane gas produced via anaerobic digestion of poultry litter from a chicken farm mixed with other organic, biodegradable materials, and use the waste heat from the electric generators to provide temperature control for the methane-producing anaerobic digester as well as the chicken houses. The Commission concluded that the thermal energy used as an input back into the anaerobic digestion process effectively increases the efficiency of the electric production from the facility; but is not used to directly produce electricity or useful, measureable thermal or mechanical energy at a retail electric customer's facility pursuant to G.S. 62-133.8(a)(1); and is not eligible for RECs. However, the thermal energy that is used to heat the chicken houses is eligible to earn RECs.
- Issued a declaratory ruling that: (1) biosolids, the organic material remaining after treatment of domestic sewage and combusted at the applicant's wastewater treatment plant, are a "renewable energy resource" as defined by G.S. 62-133.8(a)(8); and (2) the applicant, a county water and sewer authority organized in 1992 pursuant to the North Carolina Water and Sewer Authorities Act, is specifically exempt from regulation as a public utility pursuant to G.S. 62-3(23)(d).
- Accepted for registration as a new renewable energy facility a solar thermal hot water heating facility located in Mecklenburg County, North Carolina, used to heat two commercial swimming pools. The Commission concluded, however, that as an unmetered solar thermal facility, RECs earned based on the capacity of the solar panels are not eligible to meet the solar set-aside requirement of G.S. 62-133.8(d). However, the Commission allowed the applicant to earn general thermal RECs based upon an engineering analysis of the energy from the unmetered solar thermal system that is actually required to heat the pools, which was determined to be substantially less than the capacity of the solar thermal panels.
- Issued an Order concluding that primary harvest wood products, including wood chips from whole trees, are "biomass resources" and "renewable energy resources" under G.S. 62-133.8(a)(8). The

Commission reasoned that the General Assembly, by including several specific examples of biomass in the statute, did not intend to limit the scope of the term to those examples. Rather, the term "biomass" encompasses a broad category of resources and should not be limited absent express intent to do so. The Environmental Defense Fund and NCSEA appealed the Commission's Order to the North Carolina Court of Appeals. On August 2, 2011, the Court of Appeals issued a decision affirming the Commission's Order.

- Issued an Order declaring that yard waste and the percentage of RDF used as fuel are renewable energy resources, and that the percentage of Syngas produced from yard waste and RDF used as fuel is a renewable energy resource. The Commission held that yard waste is an organic material having a constantly replenished supply, and, thus, is a renewable resource under G.S. 62-133.8(a)(8).
- Accepted for registration as a new renewable facility a CHP facility determining that the portion of electricity produced by landfill gas will be eligible to earn RECs and the portion of waste steam produced from the electric turbines that is used as an input for a manufacturing process will be eligible to earn thermal RECs. However, also concluding that steam that bypasses the turbine generators and waste heat being used to pre-heat the feedwater for the boilers will not be used to directly produce electricity or useful, measureable thermal or mechanical energy at a retail electric customer's facility pursuant to G.S. 62-133.8(a)(1), and, therefore, will not be eligible to earn RECs.
- Accepted registration of residential solar thermal water heating facilities on over one thousand homes which were allowed to install meters on a representative sample of the homes, rather than on each home, to determine the number of British Thermal Units (BTUs) of thermal energy that will be produced and on which RECs will be earned, and assigned to the unmetered homes the thermal heat measures recorded on the metered homes.
- Issued an Order accepting the registrations of nine solar thermal facilities, but found that a request for a waiver of the requirement in G.S. 62-133.8(d) that solar thermal energy be measured by a meter in order to produce RECs eligible to meet the solar set-aside requirement was inappropriate, disallowing the use of RETScreen Analysis Software (RETScreen) to calculate the estimated solar thermal production of each facility. The Commission noted that there was no cited or known legal authority by which the Commission is authorized to grant such a waiver. Further, the Commission concluded that the use of RETScreen is not appropriate because it estimates the total

amount of solar thermal energy that could be produced, rather than the amount of energy actually used to heat water.

- The Commission denied the registration of a thermal system as a new renewable energy facility based upon the fact that the system would be integrated into an existing biomass facility and the thermal energy would be used to pre-heat the feed water entering the biomass-fueled boiler resulting in the use of less biomass fuel. The Commission concluded that it was appropriate to view the facility as one entity eligible to earn RECs on the electrical output of the biomass-fueled boiler, rather than two separate entities capable of earning RECs.
- Granted CPCNs with conditions and accepted registrations as new renewable energy facilities for a 300-MW wind facility in Pasquotank and Perquimans Counties and an 80-MW wind facility in Beaufort County.
- Issued an Order declaring that directed biogas is a renewable energy resource. The Commission stated that for a facility to earn RECs on electricity created using directed biogas appropriate attestations must be made and records kept regarding the source and amounts of biogas injected into the pipeline and used by the facility to avoid double counting. The Commission further noted that as provided in Commission Rule R8-67(d)(2) a facility utilizing directed biogas would earn RECs "based only upon the energy derived from renewable energy resources in proportion to the relative energy content of the fuels used." Finally, the Commission noted that each facility's registration will be considered on a case-by-case basis, and that the Commission had not addressed whether RECs earned would be subject to the out-of-state limitation on unbundled RECs under G.S. 62-133.8(b)(2)(e).
- Issued an Order stating that the policy that only net output is eligible for the issuance of RECs was not based solely on the definition of "station service" in the Commission rules, but that G.S. 62.133.8(a)(6) requires that RECs be derived from "electricity or equivalent energy" that is "supplied by a renewable energy facility." The Commission held that gross electricity used to power the facility itself cannot be considered electricity "supplied by a renewable energy facility." The Commission interpreted "station service" to encompass all electric demand consumed at the generation facility that would not exist but for the generation itself, including, but not limited to, lighting, office equipment, heating, and air-conditioning at the facility.
- Issued an Order that finding that because compensation could be built into alternative financial arrangements to recover the costs of electric

generation, that a scenario in which an electricity producer sold steam and gave away electricity must be considered "[p]roducing, generating, transmitting, delivering, or furnishing electricity ... to or for the public for compensation" under G.S. 62-3(23)a.1. The Commission noted that were it to rule otherwise it create multiple scenarios in which an electric generator could provide electrical services "free of charge" to a third party and build in compensation to recover its costs via other arrangements, thus, avoiding the statutory definition of a public utility in G.S. 62-3(23)a.1.

Issued an Order on Request for Declaratory Ruling addressing the eligible output, pursuant to S.L. 2010-195 (Senate Bill 886), to which triple credit is applied to any electric power or RECs generated by an eligible facility. The Commission held that, although the first 20 MW of biomass renewable energy facility generating capacity remained eligible for the triple credit, only the first 10 MW of biomass renewable energy facility generating capacity remained eligible to meet the poultry waste set-aside requirements in G.S. 62-133.8(f). The Commission held that the limit was on the electric generating capacity, not the amount of energy or RECs that may be earned, and that RECs may be derived from both the electric generation and the waste heat used to produce electricity or useful, measurable thermal or mechanical energy at a retail electric customer's facility

Since October 1, 2013, the Commission has issued additional orders interpreting provisions of Senate Bill 3 regarding applications for registration of renewable energy facilities, as described below.

# Order Revoking Registration of Renewable Energy Facilities and New Renewable Energy Facilities, Docket No. E-100, Sub 130 (December 17, 2013).

On December 17, 2013, the Commission issued an Order revoking the registrations of 72 facilities registered as renewable energy facilities or as new renewable energy facilities with the Commission. The owners of the 72 facilities listed in Appendices A and B of the Order did not complete their annual certifications on or before October 1, 2013, as required by the Commission's August 28, 2013 Order, nor had an annual certification been completed for these facilities as of the date of the Order. The Order stated that should the owner of a facility whose registration has been revoked wish to have the energy output from its facility become eligible for compliance with the REPS; the owner must again register the facility with the Commission.

# Orders Accepting/Amending Registrations of New Renewable Energy Facilities, Docket Nos. SP-2422, Sub 1 and SP-2014, Sub 1 (December 20, 2013, and May 5, 2014).

On December 20, 2013, and May 5, 2014, respectively in Docket Nos. SP-2422, Sub 1 and SP-2014, Sub 1, the Commission accepted/amended the registrations of a 1.9-MW<sub>AC</sub> Directed Biogas-fueled combined heat and power (CHP) facility and a 1.6-MW<sub>AC</sub> biomass fueled CHP facility that would generate electricity through the pyrolysis of wood (the first of this type registered in the State). Both facilities were certified by the Secretary of State as being located in a "cleanfields renewable energy demonstration parks."

Pursuant to the Commission's March 11, 2013 Order on Request for Declaratory Ruling in Docket No. SP-100, Sub 30, RECs eligible for triple credit pursuant to S.L. 2010-195, as amended by S.L. 2011-279, may be earned from the electric generation and the thermal energy produced from the capture and use of waste heat at a biomass-fueled combined heat and power facility located in a cleanfields renewable energy demonstration park and registered with the Commission as a new renewable energy facility. Such RECs will be recorded in the North Carolina Renewable Energy Tracking System (NC-RETS) and marked as originating from either (1) the first 10 MW of generating capacity in a cleanfields energy demonstration park and eligible for additional credits to meet the poultry waste set-aside of G.S. 62-133.8(f), or (2) the second 10 MW of generating capacity in a cleanfields energy demonstration park and eligible for additional general biomass credits. The Commission stated that, if necessary, the allocation method of RECs between the first and second 10 MW of generating capacity will be determined during the registration of a facility in a cleanfields renewable energy demonstration park as a new renewable energy facility.

The Commission accepted the registrations of the two above discussed facilities stating that all RECs derived from the facilities should be recorded by the NC-RETS Administrator as originating from the first 10 MW of generating capacity eligible for triple credit pursuant to S.L. 2010-195, as amended by S.L. 2011-279. The Commission noted in the May 5, 2014 Order that 6.5 MW of generating capacity remains that may be designated by the Commission as generating RECs to be marked as originating from the first 10 MW of generating capacity, and 10 MW of generating capacity remains that may be designated by the Commission as generating RECs to be marked as originating from the first 10 MW of generating capacity remains that may be designated by the Commission as generating RECs to be marked as originating from the first 10 MW of generating capacity for triple credit pursuant to S.L. 2010-195, as amended by S.L. 2011-279.

# Order Giving Notice of Intent to Revoke Registration of Renewable Energy Facilities and New Renewable Energy Facilities, Docket No. E-100, Sub 130 (September 9, 2014).

On September 9, 2014, the Commission issued an Order giving notice of its intent to revoke the registration of 191 renewable energy facilities and new renewable energy facilities because their owners had not completed or filed the annual certifications required each April 1, as detailed in Commission Rule R8-66(b) (11 facilities registered with NC-RETS did not complete the on-line form and 180 did not file a verified certification with the Commission). Facility owners were given until October 15, 2014, to file their annual certifications belatedly. Owners that do not complete the annual certifications face their facility's registrations being revoked pursuant to Commission Rule R8-66(f). The matter is still pending before the Commission.

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

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

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

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

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

At the end of 2013, each electric power supplier was required to place the RECs that it acquired to meet its 2013 REPS requirements into compliance accounts where the RECs are available for audit. The Commission will review each electric power suppliers' 2013 REPS compliance report; the associated RECs will be permanently retired. Members of the public can access the NC-RETS web site at <u>www.ncrets.org</u>. The site's "Resources" tab provides extensive information regarding REPS activities and NC-RETS account holders. NC-RETS also provides an electronic bulletin board where RECs can be offered for purchase.

- As of December 31, 2013, NC-RETS had issued 16,333,588 RECs and 5,066,032 EE certificates. These numbers could increase because renewable energy generators are allowed to enter historic production data for up to two years.
- As of September 1, 2014, 364 organizations, including electric power suppliers and owners of renewable energy facilities, had established accounts in NC-RETS.
- As of September 1, 2014, approximately 852 renewable energy or new renewable energy facilities had been established as NC-RETS projects, enabling the issuance of RECs based on their energy production data.

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

The original MOA with APX expired on December 31, 2013. On August 8, 2013, the Commission issued an Order in Docket No. E-100, Sub 121, scheduling a stakeholder meeting for September 24, 2013, and requesting that stakeholders come prepared to discuss the following: (1) satisfaction with NC-RETS, (2) changes to NC-RETS the Commission should consider, and (3) MOA terms in anticipation of potential legislative changes. Based on the

feedback received from the stakeholders, the Commission extended the MOA with APX for an additional three years through 2016.

## **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 public comments regarding direct, secondary, and cumulative environmental impacts of the implementation of the REPS provision of Senate Bill 3. DENR, in response to the Commission's request, noted the potential overlap of proposed U.S. Environmental Protection Agency (EPA) regulations with Senate Bill 3 resources. Specifically, DENR noted the growth of solar in North Carolina and highlighted potential sedimentation and erosion control issues associated with solar facilities. DENR further identified potential issues regarding the potential of hazardous material in solar panels and stated that the State may need to enhance its management of decommissioning plans. DENR noted that the land based wind energy resource in the State is the strongest in the mountains; however, pursuit of wind facilities in the mountains is precluded by the "Ridge Law." Regarding wind facilities, DENR additionally noted concerns with the number of bird kills associated with wind turbines and the transient nature of wind energy. In tis response, DENR also discussed biomass resources, noting the possibility of increased regulated pollutants from biomass resources in addition to increased GHG emissions. DENR noted that EPA has been unsuccessful in making the case that biomass combustion is carbon neutral. Finally, DENR noted the strides made in North Carolina in employing a diverse energy portfolio and its support for the use of clean, reliable energy sources.

# **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 EE and DSM measures. Also, pursuant to Senate Bill 3, starting in 2012, part of the REPS requirements must be met through poultry waste and swine waste (as discussed above this requirement has been amended by the Commission.) In addition, beginning in 2010 each electric power supplier was required to meet a certain percentage of its retail electric sales "by a combination of new solar electric facilities and new metered solar thermal energy facilities that use one or more of the following applications: solar hot water, solar absorption cooling, solar dehumidification, solar thermally driven refrigeration, and solar industrial process heat." G.S. 62-133.8(d). An electric power supplier is defined as "a public utility, an electric membership corporation, or a municipality that sells electric power to retail electric power customers in the State." G.S. 62-133.8(a)(3). Described below are the REPS requirements for the various electric power suppliers and, to the extent reported to the Commission, the efforts of each toward REPS compliance.

## Monitoring of Compliance with REPS Requirement

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

#### Compliance plan

Pursuant to Commission Rule R8-67(b), on or before September 1 of each year, each electric power supplier is required to file with the Commission a 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, EE measures implemented and projected impacts, avoided costs, incremental costs, and a comparison of projected costs to the annual per-account cost caps.

#### Compliance report

Pursuant to Commission Rule R8-67(c), each electric power supplier is required to annually file with the Commission a REPS compliance report. While a

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

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

## **Cost Recovery Rider**

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

Customer Class	<u>2008-2011</u>	<u>2012-2014</u>	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 a 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 a 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 a 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: DEP, Duke, and Dominion. Although Duke and DEP underwent a merger in 2012, for REPS compliance purposes they continue to operate as two distinct entities.

#### **REPS** requirement

G.S. 62-133.8(b) provides that each electric public utility in the State (Duke, DEP, and Dominion) shall be subject to a REPS requirement 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 EE measure; provided, however, an electric public utility subject to the provisions of this subsection may meet up to 25% of the requirements of this section through savings due to implementation of EE measures. Beginning in calendar year 2021 and each year thereafter, an electric public utility may meet up to 40% of the requirements of this section through savings due to implementation of EE 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 RECs created pursuant to this paragraph to another electric public utility.

- Purchase RECs 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 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 EE 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 RECs.
- Reduce energy consumption through "electricity demand reduction," which is a voluntary reduction in the demand of a retail customer achieved by two-way communications devices that are under the real time control of the customer and the electric public utility.<sup>4</sup>

#### Duke Energy Progress, Inc. (DEP)

#### Compliance Report

On June 12, 2013, in Docket No. E-2, Sub 1032, DEP filed its 2012 REPS compliance report and application for approval of its 2013 REPS cost recovery rider pursuant to G.S. 62-133.8 and Rule R8-67. By its application and testimony, DEP proposed to implement the following total REPS rates effective for service rendered on and after December 1, 2013: \$0.19 per month for residential customers; \$7.81 per month for general service/lighting customers; and \$29.68 per month for industrial customers. DEP's proposed new REPS rider, if approved, will decrease the current REPS rates (excluding gross receipts taxes and regulatory fee) by \$0.22 per month for residential customers; and decrease the rate by \$0.77 per month for industrial customers. In its 2012 REPS compliance report, DEP indicated that it acquired sufficient RECs to meet the 2012 requirement of 3% of its 2011 retail sales (1,125,269 RECs representing 3% of combined 2011 retail megawatt-hour sales of 37,508,895.) Additionally,

<sup>&</sup>lt;sup>4</sup> Sec. 1 of S.L. 2011-55 amended G.S. 62-133.8(a) by adding a definition of "electricity demand reduction," and Sec. 2 amended G.S. 62-133.8(b)(2) by adding a new subsection (g) making electricity demand reduction a REPS resource, effective April 28, 2011.

DEP indicated that it acquired sufficient solar RECs to meet the 2012 requirement of 0.07% of its 2011 retail sales (26,259 RECs.) Pursuant to the Commission's November 29, 2012 Order in Docket No. E-100, Sub 113, DEP was relieved of its 2012 swine waste set-aside requirement and its 2012 poultry waste set-aside requirement was delayed until 2013. A hearing was held on DEP's 2012 REPS compliance report and 2013 REPS cost recovery rider on September 17, 2013. On November 25, 2013, the Commission issued an Order Approving REPS and REPS EMF Riders and 2012 Compliance. The Order approved the following REPS riders: \$0.19 per month for residential customers; \$7.83 per month for general service/lighting customers; and \$29.62 per month for industrial customers. In addition, the Order approved DEP's 2012 compliance report and retired the RECs associated with that account.

On June 23, 2014, in Docket No. E-2, Sub 1043, DEP filed its 2013 REPS compliance report and application for approval of its 2013 REPS cost recovery rider pursuant to G.S. 62-133.8 and Rule R8-67. By its application and testimony, DEP proposed to implement the following total REPS rates effective for service rendered on and after December 1, 2014: \$0.88 per month for residential customers; \$5.00 per month for general service/lighting customers; and \$17.92 per month for industrial customers - each of which is below the incremental per-account cost cap established in G.S. 62-133.8(h). DEP's proposed new REPS rider, if approved, will increase the current REPS rates (excluding gross receipts taxes and regulatory fee) by \$0.69 per month for residential customers; decrease the rate by \$2.83 per month for general service/lighting customers; and decrease the rate by \$11.70 per month for industrial customers. The Commission notes that this is the first year in which the approved REPS rider for residential customers equals \$34.00 per year (as opposed to \$12.00 in previous years), as the rider is allocated between customer classes based on the ratio between the approved riders for each class, this accounts for much of the proposed increase to residential customers and the decrease to general service and industrial customers. In its 2013 REPS compliance report, DEP indicated that it acquired sufficient RECs to meet the 2013 requirement of 3% of its 2012 retail sales (1,103,531RECs representing 3% of combined 2012 retail megawatt-hour sales of 36,784,274.) Additionally, indicated that it acquired sufficient solar RECs to meet the DEP 2013 requirement of 0.07% of its 2012 retail sales (33,070 RECs.) Pursuant to the Commission's March 26, 2014 Order in Docket No. E-100, Sub 113, DEP's 2013 swine waste and poultry waste set-aside requirements were delayed until 2014. A hearing was held on DEP's 2013 REPS compliance report and 2014 REPS cost recovery rider on September 16, 2014. A final decision is pending before the Commission.

#### Compliance Plan

On September 2, 2014, in Docket No. E-100, Sub 141, DEP filed its 2014 REPS compliance plan as part of its 2014 Integrated Resource Plan (IRP).

In its plan, DEP indicated that its overall compliance strategy to meet the REPS requirements consisted of the following key components: (1) energy efficient programs that will generate savings that can be counted towards obligation requirements; (2) purchases of RECs; and (3) research studies to enhance its ability to comply in future years. DEP 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, Winterville, and the city of Waynesville.

DEP intends to achieve compliance with the solar set-aside requirements through the execution of a number of solar contracts as well as commercial and residential solar photovoltaic (PV) programs. Based on its 2013 retail sales DEP's 2014 solar set-aside requirement is approximately 25,264 RECs. Based on forecasted retail sales DEP's solar set-aside requirement is projected to be approximately 53,804 RECs and 54,453 RECs in 2015 and 2016, respectively. The solar set-aside requirement rises from 0.07% of retail sales in 2013 to 0.14% in 2015 and 2016.

DEP's primary strategy for compliance with the swine waste set-aside requirement was to jointly procure energy derived from swine waste resources with DEP and other electric power suppliers. DEP stated that it remained and continues to remain actively engaged in seeking additional resources and in making every reasonable effort to comply with the swine waste set-aside requirements. However, DEP stated that despite its efforts it will be unable to comply with the requirement in 2014 and is highly uncertain of its ability to comply in 2015 and 2016 due to multiple variables, particularly related to counterparty achievement of projected delivery requirements and commercial operation milestones. On August 28, 2014, in Docket No. E-100, Sub 113, DEP, along with several other parties, filed a motion to delay the 2014 swine waste set-aside requirement. The Commission has requested comments on the matter and it is still pending before the Commission.

DEP stated in its 2014 compliance plan that due to diligent effort it has secured enough RECs to comply with its 2014 poultry waste set-aside requirement. DEP stated that it secured, or contracted for delivery, sufficient volumes of RECs to meet its pro-rata share of the poultry waste set-aside requirement, approximately 48,752 RECs in 2014. DEP stated that it remains actively engaged in seeking additional resources and in making every reasonable effort to comply with the swine waste set-aside requirements. DEP stated that its ability to comply in 2015 and 2016 remains uncertain and largely subject to counterparty performance.

DEP stated that its general REPS requirement net of the set-asides discussed above is estimated to be 983,475 RECs in 2014, 2,017,197 RECs in 2015, and 1,956,370 RECs in 2016. DEP noted several resource options available to the Company to meet its general requirement. DEP stated that it

intends to meet 25% (the maximum allowable under the REPS) of its requirement through its energy efficiency programs. In addition, DEP plans to use hydroelectric power procured from suppliers and from its wholesale customers Southeastern Power Administration (SEPA) allocations. Finally, DEP stated that it intends to meet portions of its general requirement through a variety of biomass, wind and solar resources. DEP stated that it purchases RECs from multiple biomass facilities in the Carolinas, including landfill gas to energy facilities and biomass fueled combined heat and power facilities. DEP stated that it believes that land based wind resources will be available in the Carolinas in the next decade and that its compliance strategy will vary commensurately with changes to supporting policies and prevailing market prices. DEP also noted that opportunities may exist to transmit land-based wind energy resources into North Carolina form other regions. DEP plans to meet a portion of the general requirement with RECs from solar facilities above that portion required by the solar set-aside. DEP stated it views the downward trend in solar equipment and installation costs as a positive trend and that while uncertainty remains regarding policy support, it fully expects solar resources to contribute to compliance efforts beyond the solar set-aside minimum threshold.

#### Duke Energy Carolinas, LLC (DEC)

#### **Compliance Report**

On March 5, 2014, in Docket No. E-7, Sub 1052, DEC filed its 2013 REPS compliance report and an application for approval of a REPS rider to be effective September 1, 2013. The application requested a REPS rider of \$0.40 per month for residential customers; \$1.25 per month for general customers (the DEC equivalent of commercial class customers); and \$5.30 per month for industrial customers - each of which is below the incremental per-account cost cap established in G.S. 62-133.8(h). In its 2013 REPS compliance report, DEC indicated that it acquired sufficient RECs to meet the 2013 requirement of 3% of its 2012 retail sales (1,737,757 RECs representing 3% of combined 2012 retail sales of 57,925,034 MWh). Additionally, DEP indicated that it acquired sufficient solar RECs to meet the 2012 requirement of 0.07% of its 2012 retail sales (51,464 RECs). Pursuant to the Commission's December 20, 2013 Notice of Decision (affirmed by the March 26, 2014 Order) in Docket No. E-100, Sub 113, DEC's 2013 swine and poultry waste set-aside requirements were delayed until 2014. A hearing was held on DEC's 2013 compliance report and 2014 REPS cost recovery rider on June 3, 2014. On August 21, 2014, the Commission issued an order approving a REPS rider of \$0.39 per month for residential customers (increased from -\$0.01 the previous year); \$1.22 per month for general service accounts (decreased from \$3.14 the previous year); and \$5.11 per month for industrial customers (decreased from \$10.73 the previous year) - each of which is below the incremental per-account cost cap established in G.S. 62-133.8(h). The Commission notes that this is the first year in which the approved REPS rider for residential customers equals \$34.00 per year (as

opposed to \$12.00 in previous years), and, as the rider is allocated between customer classes based on the ratio between the approved riders for each class, this accounts for much of the proposed increase to residential customers and the decrease to general service and industrial customers when compared to last years' approved REPS riders. In the same Order the Commission approved DEC's 2013 compliance report and retired the RECs in DEC's 2013 compliance sub account.

#### Compliance Plan

On September 2, 2014, in Docket No. E-100, Sub 141, DEC filed its 2014 REPS compliance plan as part of its 2014 Integrated Resource Plan (IRP). In its plan, DEC indicated that its overall compliance strategy to meet the REPS requirements consisted of the following key components: (1) energy efficient programs that will generate savings that can be counted towards obligation requirements; (2) purchases of RECs; and (3) research studies to enhance its ability to comply in future years. DEC has agreed to provide REPS compliance services for the following wholesale customers, as allowed under G.S. 62-133.8(c)(2)(e): Rutherford Electric Membership Corporation, Blue Ridge Electric Membership Corporation, City of Dallas, Forest City, City of Concord, Town of Highlands, and the City of Kings Mountain.

DEC intends to achieve compliance with the solar set-aside requirements through the execution of a number of solar contracts as well as commercial and residential solar photovoltaic (PV) programs. Based on its 2013 retail sales Duke's 2014 solar set-aside requirement is approximately 41,169 RECs. Based on forecasted retail sales DEP's solar set-aside requirement is projected to be approximately 84,019 RECs and 84,922 RECs in 2015 and 2016, respectively. The solar set-aside requirement rises from 0.07% of retail sales in 2013 to 0.14% in 2015 and 2016.

DEC's primary strategy for compliance with the swine waste set-aside requirement was to procure energy derived from swine waste resources. DEC stated that it remained and continues to remain actively engaged in seeking additional resources and in making every reasonable effort to comply with the swine waste set-aside requirements. However, DEC stated that despite its efforts it will be unable to comply with the requirement in 2014 and is highly uncertain of its ability to comply in 2015 and 2016 due to multiple variables, particularly related to counterparty achievement of projected delivery requirements and commercial operation milestones. DEC joined the Amended Joint Motion for delay of the swine waste resource requirements until 2015 in Docket No. E-100, Sub 113. DEC stated in its 2014 compliance plan that due to diligent effort it has secured enough RECs to comply with its 2014 poultry waste set-aside requirement. DEC stated that it secured, or contracted for delivery, sufficient volumes of RECs to meet its pro-rata share of the poultry waste set-aside requirement, approximately 79,433 RECs in 2014. DEC stated that it

remains actively engaged in seeking additional resources and in making every reasonable effort to comply with the swine waste set-aside requirements. DEC stated that its ability to comply in 2015 and 2016 remains uncertain and largely subject to counterparty performance.

DEC stated that its general REPS requirement net of the set-asides discussed above is estimated to be 1,602,620 RECs in 2014, 3,150,009 RECs in 2015, and 3,051,084 RECs in 2016. DEC noted several resource options available to the Company to meet its general requirement. DEC stated that it intends to meet 25% (the maximum allowable under the REPS) of its requirement through its energy efficiency programs. In addition, DEC plans to use hydroelectric power procured from suppliers and from its wholesale customers Southeastern Power Administration (SEPA) allocations. Finally, DEC stated that it intends to meet portions of its general requirement through a variety of biomass, wind and solar resources. DEC stated that it purchases RECs from multiple biomass facilities in the Carolinas, including landfill gas to energy facilities and biomass fueled combined heat and power facilities. DEC stated that it believes that land based wind resources will be available in the Carolinas in the next decade and that its compliance strategy will vary commensurately with changes to supporting policies and prevailing market prices. DEC also noted that opportunities may exist to transmit land-based wind energy resources into North Carolina form other regions. DEC plans to meet a portion of the general requirement with RECs from solar facilities above that portion required by the solar set-aside. DEC stated it views the downward trend in solar equipment and installation costs as a positive trend and that while uncertainty remains regarding policy support, it fully expects solar resources to contribute to compliance efforts beyond the solar set-aside minimum threshold. Approval of DEC's 2014 Compliance Plan is still pending before the Commission. On August 28, 2014, in Docket No. E-100, Sub 113, DEC, along with several other parties, filed a motion to delay the 2014 swine waste set-aside requirement. The Commission has requested comments on the matter and it is still pending.

#### Dominion North Carolina Power (Dominion)

#### Compliance Report

On August 29, 2013, in Docket No. E-22, Sub 503, Dominion filed an application for approval of a 2012 REPS recovery rider and its 2012 compliance report. The report included compliance status for the Town of Windsor. Dominion stated that it met its 2012 general REPS requirement (125,368 RECs) by purchasing unbundled out-of-state solar and wind RECs and the Town of Windsor's requirement (1,463 RECs) with additional solar and biomass RECs from within the State. Dominion stated that it met is 2012 solar set-aside requirement (2,926 RECs) and the Town of Windsor's requirement (35 RECs) by purchasing solar RECs. Dominion stated that it will not be able to meet the 2013 swine waste set-aside requirements in G.S. 62-133.8(e) for either itself or

the Town of Windsor, despite the fact that Dominion can satisfy its entire requirement through the purchase of out-of-state RECs. Dominion further stated that because it can acquire out-of-state state poultry RECs, it would be able to fulfill its 2013 poultry waste set-aside requirement in G.S. 62-133.8(f), and would be able to fulfill 25% of that requirement for the Town of Windsor through out-of-state RECs. However, it would not be able to meet the remaining 75% of the requirement for the Town of Windsor due to a lack of resources. Further, for the first time, Dominion has requested approval of a REPS Rider; the request does not include any compliance costs from 2010 or 2011. Dominion has requested approval of two riders, an RPE rider to recover historical compliance costs, and an RP Rider to recover future projected 2014 compliance costs. The requested RPE rider is \$0.15 for residential accounts, \$3.03 for commercial accounts, and \$22.40 for industrial accounts. The requested RP rider is \$0.20 for residential accounts, \$2.58 for commercial accounts, and \$17.61 for industrial accounts. A hearing was held by the Commission on November 13, 2013, to consider Dominion's REPS Rider request and its 2012 compliance report. On December 18, 2013, the Commission issued an Order Approving REPS and REPS EMF Riders and 2012 Compliance. The Order approved the following total REPS riders: \$0.37 per month for residential customers; \$5.33 per month for general service/lighting customers; and \$35.93 per month for industrial customers. In addition, the Order approved Dominion's 2012 compliance report and retired the RECs associated with that account.

On August 28, 2014, in Docket No. E-22, Sub 514, Dominion filed an application for approval of a 2014 REPS recovery rider and its 2013 compliance report. The report included compliance status for the Town of Windsor. Dominion stated that it met its 2013 general REPS requirement (120,557 RECs) by purchasing unbundled out-of-state solar and wind RECs and through energy efficiency measures and the Town of Windsor's requirement (1,385 RECs) with additional solar and biomass RECs from within the State. Dominion stated that it met is 2013 solar set-aside requirement (2,881 RECs) and the Town of Windsor's requirement (34 RECs) by purchasing solar RECs. Dominion stated that its 2013 swine and poultry waste set-aside requirements in G.S. 62-133.8(e) and (f) for itself and the Town of Windsor were relieved pursuant to the Commission's March 26, 2014 Order in Docket No. E-100, Sub 113. Dominion further stated that it anticipates compliance with the swine waste set-aside for both itself and Windsor in 2014. Dominion further stated that that because it can procure 100% of its requirement from out of state it anticipates it would have been able to fulfill its 2013, and will be able to procure its 2014 poultry waste set-aside requirement in G.S. 62-133.8(f), and anticipates fulfillment of the 2014 requirement for the Town of Windsor as well.

Dominion has requested approval of two riders, an RPE rider to recover historical compliance costs, and an RP Rider to recover future projected 2014 compliance costs. The requested RPE rider is \$0.22 for residential accounts, \$0.95 for commercial accounts, and \$6.39 for industrial accounts. The requested RP rider is \$0.47 for residential accounts, \$2.09 for commercial accounts, and \$14.26 for industrial accounts. The total request represents a \$0.32 increase per month for residential customers; a \$2.29 decrease per month for general service customers; and a \$15.28 decrease for industrial customers. The Commission notes that this is the first year in which the approved REPS rider for residential customers equals \$34.00 per year (as opposed to \$12.00 in previous years), and, as the rider is allocated between customer classes based on the ratio between the approved riders for each class, this accounts for much of the proposed increase to residential customers and the decrease to general service and industrial customers when compared to last years' approved REPS riders. A hearing has been scheduled by the Commission for November 12, 2014, to consider Dominion's REPS Rider request and its 2013 compliance report.

#### Compliance Plan

On August 29, 2014, in Docket No. E-100, Sub 143, Dominion filed its 2014 REPS compliance plan as part of its 2014 IRP. In its plan, Dominion stated that it intends to meet its general REPS requirements in 2014 through 2016 through the use of new company-generated renewable energy where economically feasible, EE, and REC purchases. Dominion reiterated its responsibility to meeting the REPS requirements for its wholesale customer the Town of Windsor. In addition to the above resources, the Town of Windsor's general REPS requirement for 2014 through 2016 will also be satisfied by utilizing the Town's SEPA allocations. Dominion stated that it has contracted for enough solar RECs to satisfy its solar set-aside requirement in 2014 and 35% of its 2015 and 2016 requirement. Dominion stated that it will continue to make all reasonable efforts to satisfy the solar set-aside moving forward.

Dominion is participating with other electric power suppliers to evaluate proposals from swine and poultry waste energy suppliers to meet the swine waste and poultry waste set-aside requirements. Dominion reiterated that the Swine Waste REC Buyers Group executed seven long term contracts with swine waste to energy developers that were expected to meet their requirements until 2015. However, several of these contracts have now been terminated and Dominion stated that it is unclear if it will be able to comply with the swine waste set-aside in future years. Dominion stated that is also participating in the Poultry Waste REC Buyers Group to comply with the town of Windsor's in-state requirement. Dominion is exempt from the 25% limit on the use of out-of-state RECs for REPS compliance, and thus the company continued to search for poultry waste RECs across the country. Dominion stated it has entered into three contracts for poultry RECs and will be able to meet its 2014-2016 poultry waste set-aside requirements and will be able to meet 25% of the Town of Windsor's requirement through these contracts. On August 28, 2014, in Docket No. E-100, Sub 113, Dominion, along with several other parties, filed a motion to delay the 2014 swine waste set-aside requirement. The Commission has requested comments on the matter and it is still pending before the Commission.

#### **EMCs and Municipally-Owned Electric Utilities**

There are thirty-one EMCs serving customers in North Carolina, including twenty-six that are headquartered in the state. Twenty-five of the EMCs are members of North Carolina EMC (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 municipal and university-owned electric distribution systems serving customers in North Carolina. These systems are members of ElectriCities of North Carolina, Inc. (ElectriCities), an umbrella service organization. ElectriCities is a non-profit organization that provides many of the technical, administrative, and management services required by its municipally-owned electric utility members in North Carolina, South Carolina, and Virginia. ElectriCities is a service organization for its members, not a power supplier. Fifty-one of the North Carolina municipalities are participants in either NCEMPA or NCMPA1, municipal power agencies that provide wholesale power to their members. The remaining municipally-owned electric utilities generate their own electric power or purchase electric power from wholesale electric suppliers.

By Orders issued August 27, 2008, the Commission allowed twenty-three EMCs to file their REPS compliance plans on an aggregated basis through GreenCo,<sup>5</sup> and the fifty-one municipal members of the power agencies to file through NCEMPA and NCMPA1. On September 7, 2010, the Commission similarly allowed TVA to file annual REPS compliance plans and reports on behalf of its four wholesale customers that provide retail service to customers in North Carolina.

#### **REPS** requirement

G.S. 62-133.8(c) provides that each EMC or municipality that sells electric power to retail electric power customers in the State shall be subject to a 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 and thereafter	10% of prior year's North Carolina retail sales

<sup>&</sup>lt;sup>5</sup> Effective May 1, 2010, Blue Ridge EMC is no longer a member of GreenCo.

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

- Generate electric power at a new renewable energy facility.
- Reduce energy consumption through the implementation of DSM or EE measures.
- Purchase electric power from a renewable energy facility or a hydroelectric power facility, provided that no more than 30% of the requirements of this section may be met with hydroelectric power, including allocations made by the Southeastern Power Administration.
- Purchase RECs 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 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 DSM or EE 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 RECs.
- Reduce energy consumption through "electricity demand reduction," which is a voluntary reduction in the demand of a retail customer achieved by two-way communications devices that are under the real time control of the customer and electric power supplier.<sup>6</sup>

#### Electric Membership Corporations

#### GreenCo Solutions, Inc. (GreenCo)

On September 4, 2012, in Docket No. E-100, Sub 135, GreenCo filed its 2011 REPS compliance report. On the same day in Docket No. E-100, Sub 137, GreenCo filed its 2012 compliance plan with the Commission on behalf of its

<sup>&</sup>lt;sup>6</sup> Sec. 1 of S.L. 2011-55 amended G.S. 62-133.8(a) by adding a definition of "electricity demand reduction," and Sec. 2 amended G.S. 62-133.8(c)(2) by adding a new subsection (g) making electricity demand reduction a REPS resource, effective April 28, 2011.

member EMCs<sup>7</sup>, as well as Mecklenburg Electric Cooperative and Broad River Electric Cooperative. The Commission approved GreenCo's 2012 compliance plan in its October 14, 2013 Order in Docket E-100, Sub 137, and approved GreenCo's 2011 compliance report and retired the associated RECs in its February 18, 2014 Order in Docket E-100, Sub 135.

On September 3, 2013, in Docket No. E-100, Sub 139, GreenCo filed its 2012 REPS compliance report and its 2013 compliance plan with the Commission on behalf of its member EMCs, as well as Mecklenburg Electric Cooperative and Broad River Electric Cooperative. In its plan. GreenCo stated that it intended to use its members' allocations from SEPA, RECs purchased from both in-State and out-of-state renewable energy facilities, and EE savings from eleven approved EE programs to meet its members' REPS requirements. GreenCo submitted an M&V plan for the EE programs in both its 2012 compliance plan, as well as its 2011 compliance report, which is still pending Commission approval. Additionally, in its 2013 compliance plan GreenCo stated that M&V plans for additional programs are currently being developed and will be submitted as soon as they become available. GreenCo stated that it intends to join other electric power suppliers to request a delay to the 2013 swine waste and poultry waste set-aside REPS requirements, noting that the prospect of complying in 2014 and 2015 did not seem likely. In its 2012 REPS compliance report, GreenCo stated that it secured adequate resources to meet its members' solar set-aside requirement for 2012 (8,875 RECs for GreenCo, 2 RECs for Mecklenburg, and 5 RECs for Broad River). GreenCo also stated that it secured adequate resources to meet its members' general REPS requirement for 2012 (380,356 RECs for GreenCo. 48 RECs for Mecklenburg, and 174 RECs for Broad River). Lastly, for 2012, the REPS incremental costs incurred by GreenCo's members were significantly less (around one-fifth) than the costs allowed under the per-account cost cap in G.S. 62-133.8(h). The Commission's March 26, 2014 Order delayed implementation of GreenCo's (and the other electric power suppliers') swine and poultry waste set-aside requirements until 2014. The Commission approved GreenCo's 2012 compliance report and retired the associated RECs in its September 29, 2014 Order in Docket E-100, Sub 139.

<sup>&</sup>lt;sup>7</sup> The following EMCs are members of GreenCo: Albemarle EMC, Brunswick EMC, Cape Hatteras EMC, Carteret-Craven EMC, Central EMC, Edgecombe-Martin County EMC, Four County EMC, French Broad EMC, Haywood EMC, Jones-Onslow EMC, Lumbee River EMC, Pee Dee EMC, Piedmont EMC, Pitt & Greene EMC, Randolph EMC, Roanoke EMC, South River EMC, Surry-Yadkin EMC, Tideland EMC, Tri-County EMC, Union EMC, and Wake EMC. Effective May 1, 2010, Blue Ridge EMC is no longer a member of GreenCo. The REPS requirements of Mecklenburg Electric Cooperative, headquartered in Chase, Virginia, and Broad River Electric Cooperative, headquartered in Gaffney, South Carolina, are aggregated with the GreenCo members in its REPS compliance plan. Beginning in 2012 the requirements for the town of Oak City (a wholesale customer of Edgecombe-Martin County EMC) are included in the compliance requirements for Edgecombe-Martin County EMC.

On September 2, 2014, in Docket No. E-100, Sub 143, GreenCo filed its 2013 REPS compliance report and its 2014 compliance plan with the Commission on behalf of its member EMCs, as well as Mecklenburg Electric Cooperative, Broad River Electric Cooperative, and the Town of Oak City. In its plan, GreenCo stated that it intended to use its members' allocations from SEPA, RECs purchased from both in-State and out-of-state renewable energy facilities, and EE savings from eleven approved EE programs to meet its members' REPS requirements. GreenCo discussed its M&V plans for the eleven EE as approved by the Commission. GreenCo stated that it has joined other electric power suppliers to request a delay to the 2014 swine waste set-aside REPS requirement, noting that the prospect of complying in 2015 and 2016 is more likely than 2014. GreenCo anticipates compliance in 2014 with the poultry waste set-aside requirements. In its 2013 REPS compliance report, GreenCo stated that it secured adequate resources to meet its members' solar set-aside requirement for 2013 (8,411 RECs for GreenCo, 2 RECs for Mecklenburg, and 4 RECs for Broad River). GreenCo also stated that it secured adequate resources to meet its members' general REPS requirement for 2012 (360,465 RECs for GreenCo, 44 RECs for Mecklenburg, and 157 RECs for Broad River). GreenCo noted that the Commission delayed its poultry and swine waste set-aside requirements until 2014. Lastly, for 2013, the REPS incremental costs incurred by GreenCo's members were less (around one-fifth) of the costs allowed under the per-account cost cap in G.S. 62-133.8(h). Approval of GreenCo's 2013 compliance report and 2014 compliance plan is pending before the Commission. On August 28, 2014, in Docket No. E-100, Sub 113, GreenCo, along with several other parties, filed a motion to delay the 2014 swine waste set-aside requirement. The Commission has requested comments on the matter and it is still pending before the Commission.

#### EnergyUnited Electric Membership Corporation (EnergyUnited)

On August 31, 2012, in Docket No. E-100, Sub 137, EnergyUnited filed its 2012 IRP and 2012 REPS compliance plan with the Commission. On the same day, in Docket No. E-100, Sub 135, EnergyUnited filed its 2011 REPS compliance report with the Commission. The Commission approved EnergyUnited's 2011 compliance report and retired the associated RECs in its February 18, 2014 Order in Docket E-100, Sub 135.

On August 27, 2013, in Docket No. E-100, Sub 139, EnergyUnited filed its 2013 REPS compliance plan and its 2012 REPS compliance report with the Commission. In its report, EnergyUnited stated that it met its 2012 general REPS requirement (72,134 RECs) through its SEPA allocations, EE programs, and the purchase of RECs. EnergyUnited stated that it met its solar set-aside requirement by purchasing 1,684 solar RECs. EnergyUnited noted in its report that its incremental costs of compliance were about one-third of the per-account cost cap. In its 2013 compliance plan, EnergyUnited stated that it planned to fulfill its general REPS requirement in 2013 and beyond through the use of landfill gas

generation, RECs from its SEPA allocations; the purchase of RECs, and its two approved EE programs. EnergyUnited stated that it had already accumulated enough general RECs to meet its 2013 requirement (69,131) and anticipates accumulating enough RECs to meet its requirement for many years into the future. Further, EnergyUnited stated that it intends to meet its 2013 solar set-aside requirement through the purchase of RECs, adding that it has already accumulated enough to meet its 2013 solar set-aside requirement (1,614.) The Commission's March 26, 2014 Order delayed implementation of EnergyUnited's (and the other electric power suppliers') swine and poultry waste set-aside requirements until 2014. The Commission approved NCMPA1's 2012 compliance report and retired the associated RECs in its September 29, 2014 Order in Docket E-100, Sub 139.

On August 28, 2014, in Docket No. E-100, Sub 143, EnergyUnited filed its 2014 REPS compliance plan and its 2013 REPS compliance report with the Commission. In its report, EnergyUnited stated that it met its 2013 general REPS requirement (69,131 RECs) through its SEPA allocations, EE programs, and the purchase of RECs. EnergyUnited stated that it met its solar set-aside requirement by purchasing 1,614 solar RECs. In its 2013 compliance plan, EnergyUnited stated that it planned to fulfill its general REPS requirement in 2014 and beyond. On August 28, 2014, in Docket No. E-100, Sub 113, EnergyUnited, along with several other parties, filed a motion to delay the 2014 swine waste set-aside requirement. The Commission has requested comments on the matter and it is still pending before the Commission.

#### Tennessee Valley Authority (TVA)

On September 7, 2010, in Docket No. E-100, Sub 129, the Commission issued an Order approving TVA's request to file an aggregated REPS compliance plan and REPS compliance report on behalf of its four wholesale customers serving retail customers in North Carolina: Blue Ridge Mountain EMC, Mountain Electric Coop, Inc., Tri-State EMC, and Murphy Electric Power Board.

On August 27, 2012, in Docket No. E-100, Sub 135, TVA filed its 2012 REPS compliance plan and 2011 REPS compliance report with the Commission. The Commission approved TVA's 2011 compliance report and retired the associated RECs in its February 18, 2014 Order in Docket E-100, Sub 135.

On August 30, 2013, in Docket No. E-100, Sub 139, TVA filed its 2013 REPS compliance plan and 2012 REPS compliance report with the Commission. In its plan, TVA indicated its intent to fulfill the general REPS requirement in 2013 through 2015 with its SEPA allocations, purchase of out-of-state wind RECs, and the purchases of various in-State RECs. With regard to its cooperatives' solar set-aside requirement in years 2013 through 2015, TVA reiterated its plans to meet the requirement by generating the energy at its own facilities. In its report TVA stated it had satisfied its cooperatives' 2012 general REPS requirement with its SEPA allocations, purchase of out-of-state wind RECs, and the purchases of various in-State RECs and had satisfied its cooperatives' 2012 solar set-aside requirement through the generation of solar energy. Pursuant to the Commission's November 29, 2012 Order in Docket No. E-100, Sub 113, TVA's cooperatives were relieved of their 2012 swine waste set-aside requirement and their 2012 poultry waste set-aside requirement was delayed until 2013. The Commission's March 26, 2014 Order delayed implementation of TVA's (and the other electric power suppliers') swine and poultry waste set-aside requirements until 2014. The Commission approved TVA's 2012 compliance report and retired the associated RECs in its September 29, 2014 Order in Docket E-100, Sub 139.

On September 2, 2014, in Docket No. E-100, Sub 143, TVA filed its 2014 REPS compliance plan and 2013 REPS compliance report with the Commission. In its plan, TVA indicated its intent to fulfill the general REPS requirement in 2014 through 2016 with its SEPA allocations, purchase of out-of-state wind RECs, and the purchases of various in-State RECs. With regard to its cooperatives' solar set-aside requirement in years 2014 through 2016, TVA reiterated its plans to meet the requirement by generating the energy at its own facilities. In its report TVA stated it had satisfied its cooperatives' 2013 general REPS requirement with its SEPA allocations, purchase of out-of-state wind RECs, and the purchases of various in-State RECs and had satisfied its cooperatives' 2012 solar set-aside requirement through the generation of solar energy. TVA stated in its 2013 compliance report that it had used biomass RECs and solar energy production to comply with its 2013 requirements. TVA noted that it was relieved of its 2013 swine and poultry waste set-aside requirements. TVA stated that had no incremental costs of compliance (TVA's estimated cost cap is \$1,664,610). Approval of TVA's 2013 compliance report and 2014 compliance plan is pending before the Commission. On August 28, 2014, in Docket No. E-100, Sub 113, TVA, along with several other parties, filed a motion to delay the 2014 swine waste set-aside requirement. The Commission has requested comments on the matter and it is still pending before the Commission.

#### Halifax Electric Membership Corporation (Halifax)

On September 4, 2012, in Docket No. E-100, Sub 137, Halifax filed its 2012 REPS compliance plan with the Commission. On the same day, in Docket No. E-100, Sub 135, Halifax filed its 2011 REPS compliance report with the Commission. The Commission approved Halifax's 2012 compliance plan in its October 14, 2013 Order in Docket E-100, Sub 137, and approved Halifax's 2011 compliance report and retired the associated RECs in its February 18, 2014 Order in Docket E-100, Sub 137.

On September 3, 2013, in Docket No. E-100, Sub 139, Halifax filed its 2013 REPS compliance plan and its 2012 REPS compliance report with the Commission. In its compliance plan, Halifax stated that it intends to meet its

REPS requirements with a combination of SEPA allocations, EE programs, solar energy production, solar and wind RECs and additional resources to be determined on an ongoing basis. Halifax noted that it participated in the collaborative effort of electric power suppliers to meet the swine waste and poultry waste set-aside requirements, but that the groups' futures were uncertain, thus, Halifax individually has contracted to satisfy the 2013 and 2014 swine waste set-aside requirement. Halifax stated that compliance with its 2013 poultry waste set-aside requirement is uncertain at this time. According to its 2012 compliance report, Halifax met its 2012 general REPS requirement utilizing its SEPA allocations, various EE programs, and REC purchases. With regard to its 2012 solar set-aside requirement, Halifax met the requirement by generating solar energy on its 98.56 kW solar PV system and purchasing solar RECs. Halifax noted that its incremental costs of compliance were well below that established by the per-account cost cap. The Commission's March 26, 2014 Order delayed implementation of GreenCo's (and the other electric power suppliers') swine and poultry waste set-aside requirements until 2014. The Commission approved Halifax's 2012 compliance report and retired the associated RECs in its September 29, 2014 Order in Docket E-100, Sub 139.

On September 2, 2014, in Docket No. E-100, Sub 143, Halifax filed its 2014 REPS compliance plan and its 2013 REPS compliance report with the Commission. In its compliance plan, Halifax stated that it intends to meet its REPS requirements with a combination of SEPA allocations, EE programs, various RECs, and additional resources to be determined on an ongoing basis. Halifax noted concerns regarding the addition of industrial customers and its cost cap in future years. According to its 2013 compliance report, Halifax met its 2013 general REPS requirement utilizing its SEPA allocations, various EE programs, and REC purchases. With regard to its 2013 solar set-aside requirement, Halifax met the requirement by generating solar energy and purchasing solar RECs. Approval of Halifax's 2013 compliance report and 2014 compliance plan is pending before the Commission. On August 28, 2014, in Docket No. E-100, Sub 113, Halifax, along with several other parties, filed a motion to delay the 2014 swine waste set-aside requirement. The Commission has requested comments on the matter and it is still pending before the Commission.

#### Municipally-owned electric utilities

#### North Carolina Eastern Municipal Power Agency (NCEMPA)

On August 30, 2012, in Docket No. E-100, Sub 135, NCEMPA filed with the Commission, on behalf of its members, a 2012 REPS compliance plan and 2011 REPS compliance report. The Commission approved NCEMPA's 2011 compliance report and retired the associated RECs in its February 18, 2014 Order in Docket E-100, Sub 135.

On August 26, 2013, in Docket No. E-100, Sub 139, NCEMPA filed with the Commission, on behalf of its members, a 2013 REPS compliance plan and 2012 REPS compliance report. In its 2013 compliance plan, NCEMPA stated that its members had no plans to generate electric power at a renewable energy facility. NCEMPA stated that its members would meet their REPS requirements by purchasing RECs, as well as utilizing SEPA allocations and EE programs. The EE programs included the Home EE Kitdesigned to help residential customers understand energy usage and its effect on energy bills. The compliance plan provided a description of the M&V plan for the Home EE Kit program. NCEMPA stated that it had entered into contracts to purchase various types of RECs and will continue to investigate the market for unbundled RECs as a cost-effective means of REPS compliance. In its compliance report, NCEMPA stated that it met its 2012 general REPS requirement (214,027 RECs) through the purchase of bundled renewable energy and the purchase of solar, biomass, and wind RECs. Additionally, NCEMPA stated in its report that it met its 2012 solar set-aside requirement (4,994 RECs) by purchasing solar RECs. In its compliance plan, NCEMPA stated that it has entered into contracts for enough RECs to satisfy the solar set-aside requirement through 2015. NCEMPA stated in its report that its 2012 incremental costs were about one-ninth of the per-account cost cap and estimated in its compliance plan that the incremental costs for REPS compliance will be significantly less than its per-account cost cap in 2013 through 2015. Approval of NCEMPA's 2012 compliance report and 2013 compliance plan is pending before the Commission. On September 20, 2013, in Docket No. E-100, Sub 113, NCEMPA, along with NCMPA1, filed a motion to delay the 2013 swine and poultry waste set-aside requirements. The Commission's March 26, 2014 Order delayed implementation of NCEMPA's (and the other electric power suppliers') swine and poultry waste set-aside requirements until 2014. The Commission approved NCEMPA's 2012 compliance report and retired the associated RECs in its September 29, 2014 Order in Docket E-100, Sub 139.

On August 29, 2014, in Docket No. E-100, Sub 143, NCEMPA filed with the Commission, on behalf of its members, a 2014 REPS compliance plan and 2013 REPS compliance report. In its 2014 compliance plan, NCEMPA stated that its members had no plans to generate electric power at a renewable energy facility. NCEMPA stated that its members would meet their REPS requirements by purchasing RECs, as well as utilizing SEPA allocations and EE programs. The EE programs included the Home EE Kit discussed above. The compliance plan provided a description of the M&V plan for the Home EE Kit program. NCEMPA stated that it had entered into contracts to purchase various types of RECs and will continue to investigate the market for unbundled RECs as a cost-effective means of REPS compliance. In its compliance report, NCEMPA stated that it met its 2013 general REPS requirement (206,389 RECs) through the purchase of bundled renewable energy and the purchase of solar, biomass, and wind RECs. Additionally, NCEMPA stated in its report that it met its 2013 solar set-aside requirement (4,816 RECs) by purchasing solar RECs. In its compliance plan, NCEMPA stated that it has entered into contracts for enough RECs to satisfy the

solar set-aside requirement through 2016. NCEMPA stated in its report that its 2013 incremental costs were about one-sixth of the per-account cost cap and estimated in its compliance plan that the incremental costs for REPS compliance will be significantly less than its per-account cost cap in 2014 through 2016. Approval of NCEMPA's 2013 compliance report and 2014 compliance plan is pending before the Commission. NCEMPA indicated in its compliance plan that fulfillment of it 2014 poultry waste set-aside requirement is uncertain at this time. On August 28, 2014, in Docket No. E-100, Sub 113, NCEMPA, along with several other parties, filed a motion to delay the 2014 swine waste set-aside requirement. The Commission has requested comments on the matter and it is still pending before the Commission.

#### North Carolina Municipal Power Agency No. 1 (NCMPA1)

On August 30, 2012, in Docket No. E-100, Sub 135, NCMPA1 filed with the Commission, on behalf of its members, a 2012 REPS compliance plan and 2011 REPS compliance report. NCMPA1 estimated that its incremental costs for REPS compliance will be less than its per-account cost cap in 2012 through 2014. The Commission approved NCMPA1's 2011 compliance report and retired the associated RECs in its February 18, 2014 Order in Docket E-100, Sub 135.

On August 26, 2013, in Docket No. E-100, Sub 139, NCMPA1 filed with the Commission, on behalf of its members, a 2013 REPS compliance plan and 2012 REPS compliance report. In its 2013 compliance plan, NCMPA1 stated that it intended to investigate and develop, as applicable, new renewable energy facilities. NCMPA1 stated that its members would meet their REPS requirements by purchasing RECs, as well as utilizing SEPA allocations and EE programs. The EE programs include a Home EE Kit, High Efficiency Heat Pump Rebate Program, Commercial Prescriptive Lighting Program, Commercial and Industrial EE Program, and a Municipal EE Program. M&V plans were described in the compliance plan for each program. NCMPA1 stated that it had entered into contracts to purchase various types of RECs and would continue to investigate the market for unbundled RECs as a cost-effective means of REPS compliance. In its compliance report, NCMPA1 stated that it met its 2012 general REPS requirement (148,668 RECs) by purchasing renewable energy and through the purchase of solar, biomass, and wind RECs. Additionally, NCMPA1 stated in its report that it met its 2012 solar set-aside requirement (3,469 RECs) by purchasing electricity from solar generating facilities and through the purchase of solar RECs. In its compliance plan, NCMPA1 stated that it had entered into contracts for enough RECs to satisfy the solar set-aside requirement through 2015. NCMPA1 stated in its report that its 2012 incremental costs were about one-sixth of the per-account cost cap and estimated in its compliance plan that the incremental costs for REPS compliance will be significantly less than its per-account cost cap in 2013 through 2015. Approval of NCMPA1's 2012 compliance report and 2013 compliance plan is pending before the Commission. On September 20, 2013, in Docket No. E-100, Sub 113, NCMPA1,

along with NCEMPA, filed a motion to delay the 2013 swine and poultry waste set-aside requirements. The Commission's March 26, 2014 Order delayed implementation of NCMPA1's (and the other electric power suppliers') swine and poultry waste set-aside requirements until 2014. The Commission approved NCMPA1's 2012 compliance report and retired the associated RECs in its September 29, 2014 Order in Docket E-100, Sub 139.

On August 29, 2013, in Docket No. E-100, Sub 143, NCMPA1 filed with the Commission, on behalf of its members, a 2014 REPS compliance plan and 2013 REPS compliance report. In its 2014 compliance plan, NCMPA1 stated that it intended to investigate and develop, as applicable, new renewable energy facilities. NCMPA1 stated that its members would meet their REPS requirements by purchasing RECs, as well as utilizing SEPA allocations and EE programs. The EE programs include a Home EE Kit. M&V plans were described in the compliance plan for the program. NCMPA1 stated that it had entered into contracts to purchase various types of RECs and would continue to investigate the market for unbundled RECs as a cost-effective means of REPS compliance. In its compliance report, NCMPA1 stated that it met its 2013 general REPS requirement (145,213 RECs) by purchasing renewable energy and through the purchase of solar, biomass, and wind RECs. Additionally, NCMPA1 stated in its report that it met its 2013 solar set-aside requirement (3,389 RECs) by purchasing electricity from solar generating facilities and through the purchase of solar RECs. In its compliance plan, NCMPA1 stated that it had entered into contracts for enough RECs to satisfy the solar set-aside requirement through 2016. NCMPA1 stated in its report that its 2013 incremental costs were about one-sixth of the per-account cost cap and estimated in its compliance plan that the incremental costs for REPS compliance will be significantly less than its per-account cost cap in 2014 through 2016. Approval of NCMPA1's 2013 compliance report and 2014 compliance plan is pending before the Commission. NCMPA1 indicated in its compliance plan that fulfillment of it 2014 poultry waste set-aside requirement is uncertain at this time. On August 28, 2014, in Docket No. E-100, Sub 113, NCMPA1, along with several other parties, filed a motion to delay the 2014 swine waste set-aside requirement. The Commission has requested comments on the matter and it is still pending.

#### Fayetteville Public Works Commission (FPWC)

On September 24, 2012, FPWC filed its 2011 compliance report and 2012 compliance plan in Docket No. E-100, Sub 135. Following the Commission's January 25, 2013 Order in Docket No. E-100, Subs 129 and 131, FPWC could no longer exempt its electric consumption that was unrelated to its electric operations when calculating its REPS requirement, consequently, FPWC filed an amendment to its 2011 compliance report of June 25, 2013. In its 2012 compliance plan, FPWC stated that it intended to meet its REPS requirements by purchasing RECs, as well as utilizing SEPA allocations and EE programs. The EE programs include a compact florescent lighting program, a

LEED certified customer service building, a \$martworks Energy Efficiency Program, a GoGreen School Initiative, and improvements to city buildings. M&V plans were described in the compliance plan for each program. In its amended compliance report, FPWC stated that it met its 2011 solar set-aside requirement through the purchase of 443 solar RECs. Pursuant to the Commission's November 29, 2012 Order, FPWC was relieved of its 2012 swine waste set-aside requirement and its 2012 poultry waste set-aside requirement was delayed until 2013. FPWC stated that its incremental costs for REPS compliance are projected to be less than its per-account cost cap in 2012 through 2014. The Commission approved FPWC's 2011 compliance report and retired the associated RECs in its February 18, 2014 Order in Docket E-100, Sub 135.

On August 30, 2013, in Docket No. E-100, Sub 139, FPWC filed its 2012 compliance report and 2013 compliance plan. In its 2013 compliance plan, FPWC stated that it intended to meet its REPS requirements by purchasing RECs, as well as utilizing SEPA allocations and EE programs. In its amended compliance report, FPWC stated that it met its 2012 general REPS requirement (64,537 RECs) through the purchase of in-State and out-of-state RECs. Additionally, FPWC stated that it met its solar set-aside requirement through the purchase of 1,506 solar RECs. In its compliance plan FPWC stated that it would be unable to meet its 2013 swine waste and poultry waste set-asides and that it intended to join with other electric power suppliers in requesting an additional delay of those requirements. Finally, FPWC stated that its incremental costs for REPS compliance are projected to be less than its per-account cost cap in 2013 through 2015. On September 16, 2013, in Docket No. E-100, Sub 113, FPWC, along with seven other parties, filed a motion to delay the 2013 swine and poultry waste set-aside requirements. The Commission's March 26, 2014 Order delayed implementation of NCMPA1's (and the other electric power suppliers') swine and poultry waste set-aside requirements until 2014. The Commission approved FPWC's 2012 compliance report and retired the associated RECs in its September 29, 2014 Order in Docket E-100, Sub 139.

On August 28, 2014, in Docket No. E-100, Sub 143, FPWC filed its 2013 compliance report and 2014 compliance plan. In its 2014 compliance plan, FPWC stated that it intended to meet its REPS requirements by purchasing RECs, as well as utilizing SEPA allocations and EE programs. In its compliance report, FPWC stated that it met its 2013 general REPS requirement (60,224 RECs) through the purchase of in-State and out-of-state RECs. Additionally, FPWC stated that it met its solar set-aside requirement through the purchase of 1,405 solar RECs. In its compliance plan FPWC stated that it would be unable to meet its 2014 swine waste set-aside requirement and that it intended to join with other electric power suppliers in requesting an additional delay of the requirement. Finally, FPWC stated that its incremental costs for REPS compliance are projected to be less than its per-account cost cap in 2014 through 2016. On August 28, 2014, in Docket No. E-100, Sub 113, FPWC, along with several other parties, filed a motion to delay the 2014 swine waste

set-aside requirement. The Commission has requested comments on the matter and it is still pending before the Commission.

#### Oak City

On August 29, 2012, in Docket No. E-100, Sub 135, Oak City filed its 2012 REPS compliance plan and 2011 REPS compliance report. Oak City's compliance plan stated that, due to its small size and the burden of compliance, Oak City had reached a preliminary agreement with Edgecombe-Martin County EMC, its wholesale provider, to meet the Town's REPS requirement. Edgecombe-Martin County EMC utilizes GreenCo as its compliance agent; Oak City expected the transition to be complete at the end of 2012. Oak City stated that beginning January 1, 2013, it will compensate Edgecombe-Martin County EMC for the cost of compliance moving forward. To satisfy 2012 requirements Oak City intended to purchase solar and generic RECs, as well as swine and poultry RECs if available. Pursuant to the Commission's November 29, 2012 Order in Docket No. E-100, Sub 113, Oak City was relieved of its 2012 swine waste set-aside requirement and its 2012 poultry waste set-aside requirement was delayed until 2013. Oak City's 2011 REPS compliance report stated that it acquired one solar REC to meet its 2011 solar set-aside requirement. The Commission approved Oak City's 2011 compliance report and retired the associated RECs in its February 18, 2014 Order in Docket E-100, Sub 135.

In its 2012 and 2013 compliance reports, GreenCo indicated that it had included Oak City in its calculation of Edgecombe-Martin County EMC's REPS requirements.

#### <u>Winterville</u>

On August 30, 2012, in Docket No. E-100, Sub 135, Winterville filed its 2012 REPS compliance plan and 2011 REPS compliance report. Winterville stated that it continues to implement existing EE programs and investigate the potential for implementing new programs. However, Winterville indicated that it would be primarily purchasing RECs due to the lower than anticipated cost of RECs and the expense of EE programs. Winterville indicated that it had not purchased any RECs yet for 2012 compliance, but that it expected to purchase RECs in August through November of 2012. Winterville had not participated in the joint buyers groups for swine or poultry RECs, but indicated that it was willing to purchase swine and poultry RECs from other utilities or on the market if available. Winterville requested that any delay granted as a result of the Amended Joint Motion for delay of both the swine waste and poultry waste resource requirements until 2014 in Docket No. E-100, Sub 113, also apply to Winterville. Winterville's 2011 REPS compliance report stated that it met its 2011 solar set-aside requirement by purchasing solar RECs. Approval of Winterville's 2011 compliance report and 2012 compliance plan is still pending before the Commission. Pursuant to the Commission's November 29, 2012 Order

in Docket No. E-100, Sub 113, Winterville was relieved of its 2012 swine waste set-aside requirement and its 2012 poultry waste set-aside requirement was delayed until 2013. The Commission approved Winterville's 2011 compliance report and retired the associated RECs in its February 18, 2014 Order in Docket No. E-100, Sub 135.

On August 30, 2013, in Docket No. E-100, Sub 139, Winterville filed its 2013 REPS compliance plan and 2012 REPS compliance report. Winterville stated that it will only continue to implement its existing CFL Lighting program and will cease its other EE programs due to inefficiency and the difficulty and cost of verification. Winterville indicated that it would be primarily purchasing RECs due to the lower than anticipated cost of RECs and the expense of EE programs. Winterville indicated that it had not purchased any RECs yet for 2013 compliance, but that it expected to purchase RECs in August through December of 2013. Winterville further explained that in the last guarter of 2013 it anticipated entering into an agreement with DEP to provide REPS compliance services. In its 2012 REPS compliance report, Winterville stated that it met its 2012 solar set-aside requirement by purchasing 36 solar RECs. Additionally, Winterville stated that it met its 2012 general requirement of 1,511 RECs by purchasing RECs and earning EE RECs. Finally, Winterville stated that its incremental costs were below the per-account cost cap for compliance in 2012. The Commission's March 26, 2014 Order delayed implementation of Winterville's (and the other electric power suppliers') swine and poultry waste set-aside requirements until 2014. The Commission approved Winterville's 2012 compliance report and retired the associated RECs in its September 29, 2014 Order in Docket E-100. Sub 139. In its 2013 compliance report, DEP indicated that it had included Winterville as a wholesale customer for which it handled REPS compliance.

#### Town of Fountain (Fountain)

On August 29, 2012, in Docket No. E-100, Sub 135, Fountain filed its 2012 compliance plan and 2011 compliance report. Fountain noted in its compliance plan that it would look into EE programs, but that the bulk of its compliance with the general REPS requirement for 2012 through 2014 would be satisfied through the purchase of RECs. Fountain's report stated that its 2011 REPS compliance requirement was one solar REC. Fountain also stated that in 2011 it purchased an additional solar REC to belatedly comply with its 2010 solar requirement. Fountain also noted that it was not a party in the Amended Joint Motion for delay of both the swine waste and poultry waste resource requirements until 2014 in Docket No. E-100, Sub 113. However, by separate letter Fountain requested that the Commission apply any relief from the swine waste and poultry waste set-asides granted in that proceeding to Fountain as well. Fountain indicated it would purchase swine and poultry RECs to satisfy available. Pursuant to the its future requirements if Commission's November 29, 2012 Order in Docket No. E-100, Sub 113, Fountain was relieved of its 2012 swine waste set-aside requirement and its 2012 poultry waste set-aside requirement was delayed until 2013. The Commission approved Fountain's 2011 compliance report and retired the associated RECs in its February 18, 2014 Order in Docket E-100, Sub 135.

On August 19, 2013, in Docket No. E-100, Sub 139, Fountain filed its 2013 compliance plan and 2012 compliance report. Fountain noted in its compliance plan that it would look into EE programs, but that the bulk of its compliance with the general REPS requirement for 2013 through 2015 would be satisfied through the purchase of RECs. Fountain indicated that it currently has enough solar RECs to satisfy both its 2013 and 2014 solar set-aside requirements, but that it will need to contract the purchase of all other remaining requirements. In its compliance report, Fountain stated that its 2012 general REPS requirement was 111 RECs and its solar set-aside requirement was one solar REC, both which were satisfied through the purchase of RECs. Further, Fountain noted that its incremental costs were about two-thirds of the allowed per-account cost cap. The Commission approved Fountain's 2012 compliance report and retired the associated RECs in its September 29, 2014 Order in Docket E-100, Sub 139.

On August 28, 2014, in Docket No. E-100, Sub 143, Fountain filed its 2014 compliance plan and 2013 compliance report. Fountain noted in its compliance plan that compliance for 2014 through 2016 would be satisfied through the purchase of RECs. Fountain stated that it has no plans to explore energy efficiency or demand side management programs. In its compliance report, Fountain stated that its 2013 general REPS requirement was 101 RECs and its solar set-aside requirement was 3 solar RECs, both which were satisfied through the purchase of RECs. Further, Fountain noted that its incremental costs were about one-third of the allowed per-account cost cap. Approval of Fountain's 2014 compliance plan and 2013 compliance report is still pending.

#### Wholesale Providers Meeting REPS Requirements

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

## RECOMMENDATION

The Commission recommends that G.S. 62-300 be amended to add a \$25.00 filing fee for applications for registration of renewable energy facilities. The Commission has received more than 4,000 reports of proposed construction and registration applications since the implementation of Senate Bill 3. A reasonable fee for registration applications will help defray the cost of processing the applications and issuing orders of registration.

### CONCLUSIONS

All of the electric power suppliers have met or appear to have met the 2012 and 2013, and appear on track to meet the 2014, general REPS requirements. All of the electric power suppliers have met the 2012, and appear to have met the 2013, solar set-aside requirement of Senate Bill 3. A joint motion to delay implementation of the 2013 swine and poultry waste set-aside requirements was granted, in part, delaying implementation of those sections of the REPS by one additional year. Despite this action, most electric power suppliers do not appear on track to meet the swine waste set-aside for 2014 and have requested a further delay to this requirement. In addition, as stated in the 2013 Report and as highlighted again in this report, numerous issues continue to arise in the implementation of Senate Bill 3 that have required interpretation by the Commission of the statutory language: e.g., the definition of new renewable energy facility, the electric power suppliers' requirements under the set-aside provisions, the eligibility of renewable energy facilities and resources to meet the set-aside provisions, etc. If the plain language of the statute was ambiguous, the Commission attempted to discern the intent of the General Assembly in reaching its decision on the proper interpretation of the statute.

## APPENDICES

#### APPENDICES

- 1. Environmental Review
  - Letter from Chairman Edward S. Finley, Jr., North Carolina Utilities Commission, to Secretary John E. Skvarla, III, North Carolina Department of Environment and Natural Resources (July 17, 2014)
  - Letter from Donald R. van der Vaart, Deputy Secretary, North Carolina Department of Environment and Natural Resources, to Chairman Edward S. Finley, Jr., North Carolina Utilities Commission (September 8, 2014)
- 2. Rulemaking Proceeding to Implement Session Law 2007-397
  - Final Order Modifying the Poultry and Swine Waste Set-Aside Requirements and Providing Other Relief, Docket No. E-100, Sub 113 (March 26, 2014)
  - Order Regarding Accounting Treatment for REC Sales, Docket No. E-100, Sub 113 (May 13, 2014)
- 3. Renewable Energy Facility Registrations
  - Order Revoking Registration of Renewable Energy Facilities and New Renewable Energy Facilities, Docket No. E-100, Sub 130 (December 17, 2013).
  - Order Amending Registration of New Renewable Energy Facility, Docket No. SP-2422, Sub 1 (December 20, 2013).
  - Order Accepting Registration of New Renewable Energy Facility, Docket No. SP-2014, Sub 1 (May 5, 2014).
  - Order Giving Notice of Intent to Revoke Registration of Renewable Energy Facilities and New Renewable Energy Facilities, Docket No. E-100, Sub 130 (September 9, 2014).

# **APPENDIX 1**



### State of North Carolina Utilities Commission

4325 Mail Service Center Raleigh, NC 27699-4325

COMMISSIONERS EDWARD S. FINLEY, JR., CHAIRMAN BRYAN E. BEATTY SUSAN W. RABON

July 17, 2014

COMMISSIONERS TONOLA D. BROWN-BLAND DON M. BAILEY JERRY C. DOCKHAM JAMES G. PATTERSON

Secretary John E. Skvarla, III North Carolina Department of Environment and Natural Resources 1601 Mail Service Center Raleigh, NC 27699-1601

Dear Secretary Skvarla:

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

The Commission is not aware of the receipt of any public comments related to this issue. In order to respond to the General Assembly, I am requesting that the Department provide to the Commission any information it may have "regarding direct, secondary, and cumulative environmental impacts of the implementation of" the REPS requirement, including any public comments received by the Department. Your response by September 1, 2014, is appreciated so that the Commission may meet its deadline.

> 430 North Salisbury Street • Raleigh, North Carolina 27603 Telephone No: (919) 733-4249 Facsimile No: (919) 733-7300 www.ncuc.net

Secretary John E. Skvarla, III July 17, 2014 Page 2

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

Very truly yours,

Ednur S. Finly , of

Edward S. Finley, Jr.

ESF/LSW

cc: Mitch Gillespie, Assistant Secretary for Environment, DENR Kathleen Waylett, North Carolina Attorney General's Office



#### North Carolina Department of Environment and Natural Resources

Pat McCrory Governor John E. Skvarla, Secretary

September 8, 2014

Mr. Edward S. Finley, Chairman North Carolina Utilities Commission 4325 Mail Service Center Raleigh, North Carolina 27699-4325

Re: Renewable Energy and Energy Efficiency Portfolio Standard

Dear Mr. Finely:

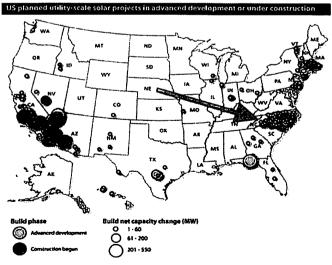
I am writing in response to your letter of July 17, 2014 to Secretary Skvarla requesting information regarding the direct, secondary and cumulative environmental impacts of the implementation of the Renewable Energy and Energy Efficiency Portfolio Standard (REPS).

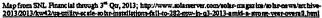
Recently, the Federal Environmental Protection Agency (EPA) proposed sweeping regulations that include some of the same energy sources as those targeted by Senate Bill 3 (SB 3). The sweeping nature of the proposed regulations initiated a nationwide debate on a variety of aspects of energy sources. The following comments serve to provide a brief summary of the ongoing debate.

Solar Power - As you are aware, North Carolina has experienced phenomenal growth in solar

energy over the past year, with solar now generating 2.5 times more electricity than required by the final SB 3 solar mandate in 2018.<sup>1</sup>

With greater presence, collateral impacts are manifest. Solar facilities are typically constructed on large tracts of land that require clearing and grading. Because this activity often results in soil compaction, alteration of drainage channels, and increased runoff and erosion, solar developers are required to obtain approval of their sedimentation and erosion control plans through DENR's Land Quality





<sup>1</sup> Tables 1.06B and 1.20 B, <u>http://www.eia.gov/electricity/monthly/current\_year/july2014.pdf</u>

Section or from a delegated local government program prior to construction. These plans specify actions, such as diverting runoff to a basin and installing silt fences, required to mitigate the impacts. Although we expect most solar developers to be environmentally responsible, we do have some concerns about how hastily these projects are built and the ecological impact of the habitat loss. There seems to be a push to complete each project in a few months, which frequently means construction crews continue working when it rains, increasing the likelihood for sedimentation runoff. While DENR typically inspects each solar farm only once during construction, this year we have already issued four notices of violation, including two with civil penalties, for failing to follow sedimentation and erosion control plans.

Improper handling of solar panels at the end of their useful life may have a significant impact on our state. According to the U.S. Bureau of Land Management (BLM), "photovoltaic panels may contain hazardous materials, and although they are sealed under normal operating conditions, there is the potential for environmental contamination if they were damaged or improperly disposed upon decommissioning."<sup>2</sup> The BLM recommends good maintenance practices and proper planning to minimize impacts from hazardous materials. North Carolina may need to consider following the BLM's lead in requiring solar developers to prepare decommissioning plans and purchase a performance bond or other similar security that will be issued either by an insurance company or a financial institution to guarantee the satisfactory decommissioning and reclamation of the project site. A typical 5 MW solar farm has more than 15,000 panels with a total weight in excess of one million pounds.<sup>3</sup>

*Wind Energy* – North Carolina has significant wind resources located along the ridge of our Smoky Mountains, but North Carolina is the only state in the country with a "Ridge Law" prohibiting the exploitation of this resource. The law was passed for aesthetic reasons demonstrating that many environmental decisions require a balance of competing interests. The state's other onshore wind resources are not as strong and are located primarily in areas where the U.S. Fish and Wildlifé Service deem wind energy a high risk for wildlife and habitats.<sup>4</sup> Environmental concerns of wind energy include the significant land resource required for efficient development, the harm to bird populations, including the protected bald eagle, and the transient nature of the power produced through wind.

Wind farms cover on average 85 acres of land for every MW nameplate capacity, mainly to minimize power loss due to wake effects from one turbine affecting another.<sup>5</sup> Approximately 150,000 acres of wind turbines are needed to generate as much electricity as a 1,000 MW capacity nuclear reactor.<sup>6</sup>

Much has been said about the impact wind energy has on birds. The American Bird Conservancy estimates that wind turbines in the U.S. will kill at least one million birds each year

<sup>&</sup>lt;sup>2</sup> U.S. Bureau of Land Management; <u>http://solareis.anl.gov/guide/environment/index.cfm</u> <sup>3</sup> pe solar farm fact sheet;

http://wh.ieee.org/cmte/substations/scm0/Raleigh%20Meeting/Conference%20PDFs/Technical%20tours/PE\_Solar\_Farm\_Fact\_Sheet.pdf 4 U.S. Fish and Wildlife Service; http://www.fws.gov/raleigh/pdfs/NC\_wind\_tool.pdf

<sup>&</sup>lt;sup>5</sup> National Renewable Energy Laboratories; <u>http://www.nrel.gov/docs/fy09osti/45834.pdf;</u> Table 1.

<sup>&</sup>lt;sup>6</sup> U.S. Nuclear Regulatory Commission; <u>http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1437/v1/TBL&-2.html</u>

and probably significantly more by 2030.<sup>7</sup> The birds at risk include Golden Eagles, Whooping Cranes and many migratory songbirds. North Carolina based Duke Energy was fined \$1,000,000 for deaths of, among other species, eagles at a wind farm they operate in Wyoming.<sup>8</sup> However, since that time the Obama administration amended one of its rules to exempt eagle kills by wind farms for up to 30 years. The rule has been challenged in federal court by a special interest group claiming the rule change violates the Federal Bald and Golden Eagle Protection Act.

The transient nature of wind energy has also been to subject of some controversy. Some claim that the transient load balancing by fossil-fuel fired generation plants, including coal and natural gas plants, necessitated by the nature of wind farms actually leads to more pollution than if the wind farms did not exist. Lawsuits have been brought on the basis of these studies by specialinterest groups. NC DENR is currently reviewing studies on the subject to determine their credibility.

Biomass combustion - The combustion of biomass is a broad area that can encompass various fuels and combustion technologies. Results to date have confirmed that the combustion of woody biomass in at least some traditional combustion technologies can lead to higher emissions of regulated pollutants than coal combustion. Wood is a lower quality fuel so the differences are greater when expressed on a per MWh basis. The following table illustrates the findings.

Pollutant	New Wood <sup>9</sup>	Existing Wood <sup>10</sup> [wet /dry]	New Coal <sup>11</sup>	Existing Coal <sup>12</sup>	Poultry Litter <sup>13</sup>
CO (lb/MWh)	0.26	7.84	0.6	0.27	2.34
PM (lb/MWh)	0.26	2.87/3.79	0.04	0.63	10.39
NOx (lb/MWh)	0.68	2.87/6.43	0.472	3.71	3.27
$SO_2$ (lb/MWh)	0.00	0.33	0.072	16.58	5.64
HCl (lb/MWh)	0.0004	0.25	0.0004	0.59	0.18
CO <sub>2</sub> (lb/MWh)	N/A	2,547	1,780	2,620	2,961
Heat Rate (mmBtu/MWh)	13.00	13.06	8.90	12.80	14.10

This is not to say biomass cannot be burned in environmentally protective ways. Combustion when combined with gasification shows promise in this regard. While SB 3 did not explicitly

<sup>&</sup>lt;sup>7</sup> American Bird Conservancy; <u>http://www.abcbirds.org/abcprograms/policy/collisions/wind\_faq.html</u>

<sup>&</sup>lt;sup>8</sup> The Christian Science Monitor; http://www.csmonitor.com/Environment/2013/1123/Eagle-deaths-Unprecedented-1-million-fine-for-Wyomingwind-farms

Nov. 2013 source test results from the new Gainesville (FL) Renewable Energy Center, 100 MW Clean Woody Biomass-Fueled BFB Boiler http://www.dep.state.fl.us/Air/emission/bioenergy/gainesville/GREC\_Initial\_TitleV\_Air\_Op\_Permit\_Application\_02-10-2014.pdf<sup>10</sup> Cliffside unit 6 (started operation June 2012).

SO<sub>2</sub> and NOx compliance limits from 2Q.0309.

CO and PM<sub>10</sub> compliance limits from 2D .0530 permit limits.

Test results from November 2012.

PM<sub>10</sub> includes filterable and condensable

HCl from May 16, 2013 test (includes 99.971% removal efficiency)

<sup>#</sup> Rolling 30-day average from testing that ended January 2013

<sup>&</sup>lt;sup>11</sup> AP-42 section 1.6 (July 2001 revision - an average of many test results)

<sup>&</sup>lt;sup>12</sup> Original 2008 REC presentation data.

<sup>&</sup>lt;sup>13</sup> CCCP May 2013 testing (2 runs @ 60% litter, 1 run @ 80%). Second PM from July 2013 test (3 runs @ 80%)

mention the emission of GHG, the legislative report that supported its passage did include a study of GHGs. That report cited biomass combustion as carbon dioxide "neutral" in some senses. However, since that report in 2007, EPA has been unsuccessful in making this case, and many special-interest groups have argued that simply burning wood is not carbon dioxide neutral. This, coupled with the increased levels of traditional air pollutants discussed above, has motivated NC DENR to study the impact of biomass further.

Great strides have been made in employing a diverse energy portfolio in the state that meets the needs of consumers, provides greater energy security and protects the environment. North Carolina's economic and environmental health depends upon responsible, timely and efficient energy production. NC DENR supports the use of clean, reliable energy sources and will continue to monitor the environmental impacts of the implementation of the REPS requirements.

Sincerely.

Donald R. van der Vaart, Ph.D., P.E., Deputy Secretary NCDENR

# APPENDIX 2

#### STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. E-100, SUB 113

#### BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of
Rulemaking Proceeding to Implement
Session Law 2007-397

FINAL ORDER MODIFYING THE POULTRY AND SWINE WASTE SET-ASIDE REQUIREMENTS AND PROVIDING OTHER RELIEF

HEARD: Tuesday, November 5, 2013, Commission Hearing Room 2115, Dobbs Building, 430 North Salisbury Street, Raleigh, North Carolina

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BEFORE: Chairman Edward S. Finley, Jr., Presiding, and Commissioners Bryan E. Beatty, Susan W. Rabon, ToNola D. Brown-Bland, Jerry C. Dockham, and James G. Patterson

#### APPEARANCES:

For Duke Energy Carolinas, LLC, and Duke Energy Progress, Inc.:

Lawrence B. Somers, Deputy General Counsel, Duke Energy Corporation, P.O. Box 1551, NCRH 20, Raleigh, North Carolina 27602

For Dominion North Carolina Power, Inc.:

E. Brett Breitschwerdt and Mary Lynne Grigg, McGuireWoods LLP, 434 Fayetteville Street, Suite 2600, Raleigh, North Carolina 27601

For GreenCo Solutions, Inc.:

Richard M. Feathers, GreenCo Solutions, Inc., 3400 Sumner Boulevard, P.O. Box 27306, Raleigh, North Carolina 27611-7306

For North Carolina Eastern Municipal Power Agency and North Carolina Municipal Power Agency No. 1:

Daniel C. Higgins, Burns, Day & Presnell, P.A., P.O. Box 10867, Raleigh, North Carolina 27605

For EnergyUnited Electric Membership Corporation:

Phillip Harris, Nelson Mullins Riley & Scarborough LLP, GlenLake One, Suite 200, 4140 Parklake Avenue, Raleigh, North Carolina 27612

For the Public Works Commission of the City of Fayetteville:

James P. West, West Law Offices, P.C., 434 Fayetteville Street, Suite 2325, Raleigh, North Carolina 27601

For the Tennessee Valley Authority:

Mark S. Calvert, Senior Attorney, Tennessee Valley Authority, 400 W. Summit Hill Drive, WT 6A, Knoxville, Tennessee 37902

For the North Carolina Sustainable Energy Association:

Michael D. Youth, North Carolina Sustainable Energy Association, 1111 Haynes St, Raleigh, North Carolina 27604

For Green Energy Solutions NV, Inc.:

R. Sarah Compton, PO Box 12728, Raleigh, North Carolina 27605

For the North Carolina Pork Council:

Kurt J. Olson, Law Office of Kurt J. Olson, 3737 Glenwood Avenue, Suite 100, Raleigh, North Carolina 27612

For North Carolina Poultry Federation, Inc:

Henry W. Jones, Jr., Jordan Price Wall Gray Jones & Carlton, 1951 Clark Avenue, Raleigh, North Carolina 27605

For the Using and Consuming Public:

Robert S. Gillam and Tim R. Dodge, Staff Attorneys, North Carolina Utilities Commission – Public Staff, 4326 Mail Service Center, Raleigh, North Carolina 27699-4326

BY THE COMMISSION: On November 29, 2012, in the above-captioned proceeding, the Commission issued an Order (2012 Delay Order) modifying the 2012 poultry and swine waste set-aside requirements under the State's Renewable Energy and Energy Efficiency Portfolio Standard (REPS) established in G.S. 62-133.8. These requirements are set forth in subsections (e) and (f) of G.S. 62-133.8, establishing set-asides within the electric power suppliers' overall renewable energy requirement. Pursuant to the 2012 Delay Order, the Commission eliminated the 2012 swine waste set-aside requirement for all electric power suppliers and delayed by one year the

poultry waste set-aside requirement for all electric power suppliers. Consistent with that Order, the electric power suppliers, in the aggregate, were required to comply with the requirements of G.S. 62-133.8(e) according to the following schedule:

<u>Calendar Year</u>	Requirement for Swine Waste Resources
2013-2014	0.07%
2015-2017	0.14%
2018 and thereafter	0.20%

Further, the electric power suppliers, in the aggregate, were required to comply with the requirements of G.S. 62-133.8(f) according to the following schedule:

<u>Calendar Year</u>	Requirement for Poultry Waste Resources
2013	170,000 megawatt hours
2014	700,000 megawatt hours
2015 and thereafter	900,000 megawatt hours

On September 16, 2013, Duke Energy Carolinas, LLC (DEC);<sup>1</sup> Duke Energy Progress, Inc. (DEP);<sup>2</sup> Virginia Electric and Power Company, d/b/a Dominion North Carolina Power (DNCP);<sup>3</sup> GreenCo Solutions, Inc. (GreenCo);<sup>4</sup> the Public Works Commission of the City of Fayetteville (Fayetteville); EnergyUnited Electric Membership Corporation (EnergyUnited); Halifax Electric Membership Corporation (Halifax); and the Tennessee Valley Authority (TVA)<sup>5</sup> (collectively, the Joint Movants) filed a Joint Motion to Modify and Delay the 2013 Requirements of N.C.G.S. 62-133.8(e) and (f) Due to Lack of Sufficient Swine and Poultry Waste (Joint Motion). On September 20, 2013, the

<sup>&</sup>lt;sup>1</sup> DEC asserted that it is also acting in its capacity as REPS compliance aggregator for Blue Ridge Electric Membership Corporation (EMC), Rutherford EMC, the City of Dallas, Forest City, the City of Concord, the Town of Highlands and the City of Kings Mountain.

<sup>&</sup>lt;sup>2</sup> DEP asserted that it is also acting in its capacity as REPS compliance aggregator for the towns of Sharpsburg, Lucama, Black Creek, and Stantonsburg, and the City of Waynesville.

<sup>&</sup>lt;sup>3</sup> Dominion asserted that it is also acting in its capacity as REPS compliance aggregator for the Town of Windsor.

<sup>&</sup>lt;sup>4</sup> In its September 3, 2013 REPS compliance plan in Docket No. E-100, Sub 113, GreenCo stated that its members are Albemarle EMC, Brunswick EMC, Cape Hatteras EMC, Carteret-Craven EMC, Central EMC, Edgecombe-Martin County EMC, Four County EMC, French Broad EMC, Haywood EMC, Jones-Onslow EMC, Lumbee River EMC, Pee Dee EMC, Piedmont EMC, Pitt & Greene EMC, Randolph EMC, Roanoke EMC, South River EMC, Surry-Yadkin EMC, Tideland EMC, Tri-County EMC, Union EMC and Wake EMC. GreenCo has stated that it also provides REPS compliance services for Broad River Electric Cooperative and Mecklenburg Electric Cooperative, and that the REPS requirements for the Town of Oak City are included in the requirements for Edgecombe-Martin County EMC.

<sup>&</sup>lt;sup>5</sup> TVA asserted that it is acting in its capacity as REPS compliance aggregator for Blue Ridge Mountain EMC, Mountain Electric Cooperative, Tri-State EMC and Murphy Electric Power Board.

North Carolina Eastern Municipal Power Agency (NCEMPA)<sup>6</sup> and North Carolina Municipal Power Agency Number 1 (NCMPA1)<sup>7</sup> (collectively, the Power Agencies) filed a similar joint motion requesting that the Commission delay the 2013 poultry and swine waste set-aside requirements for one year (Power Agency Motion).

Both the Joint Movants and the Power Agencies requested that the Commission, pursuant to G.S. 62-133.8(i)(2), often referred to as the "off-ramp" provision of the REPS statute, grant relief from compliance with the 2013 poultry and swine waste set-aside requirements by ordering a one-year delay of both set-aside requirements. G.S. 62-133.8(i)(2) states that the Commission may modify or delay the provisions of subsections (b), (c), (d), (e), and (f) of G.S. 62-133.8 in whole, or in part, if the Commission determines that it is in the public interest to do so. General Statute 62-133.8(i)(2) requires that each electric power supplier requesting relief demonstrate that it made a reasonable effort to meet the requirements set out in the REPS statute.

On September 23, 2013, the Commission issued an Order Scheduling Hearing and Requiring Testimony setting the matter for hearing, establishing deadlines for filing testimony, and requiring the Joint Movants and Power Agencies to respond to questions posed by the Commission. The Order directed each electric power supplier, or its REPS compliance aggregator, to address: (1) the actions it has taken to meet the swine waste and poultry waste requirements; (2) the number of poultry and swine waste renewable energy certificates (RECs) it is currently required to retire for 2013 compliance; and (3) the number of poultry and swine waste RECs it anticipates that it will own by the end of 2013.

On October 11, 2013, DEC and DEP filed the direct testimony of Jonathan L. Byrd, Manager of Renewable Strategy and Compliance; DNCP filed the direct testimony of Chiman H. Muchhala, Manager of Market Operations; Halifax filed the direct testimony of Charles H. Guerry, Executive Vice President; EnergyUnited filed the direct testimony of Alec Natt, Chief Financial Officer; Fayetteville filed the direct testimony of Keith Lynch, Power Contracts and Regulatory Manager; NCEMPA and NCMPA1 filed the direct testimony of Andrew M. Fusco, Vice President of Member Planning and Corporate Services, ElectriCities of North Carolina, Inc.; GreenCo filed the

<sup>&</sup>lt;sup>6</sup> According to its August 26, 2013 filing in Docket No. E-100, Sub 139, NCEMPA provides REPS compliance services for the following municipalities, which are also members of NCEMPA: Apex, Ayden, Belhaven, Benson, Clayton, Edenton, Elizabeth City, Farmville, Fremont, Greenville, Hamilton, Hertford, Hobgood, Hookerton, Kinston, LaGrange, Laurinburg, Louisburg, Lumberton, New Bern, Pikeville, Red Springs, Robersonville, Rocky Mount, Scotland Neck, Selma, Smithfield, Southport, Tarboro, Wake Forest, Washington, and Wilson. (The City of Wilson meets the REPS compliance requirements of the towns of Pinetops, Macclesfield, and Walstonburg.)

<sup>&</sup>lt;sup>7</sup> According to its August 26, 2013 filing in Docket No. E-100, Sub 139, NCMPA1 provides REPS compliance services for the following municipalities, which are also members of NCMPA1: Albemarle, Bostic, Cherryville, Cornelius, Drexel, Gastonia, Granite Falls, High Point, Huntersville, Landis, Lexington, Lincolnton, Maiden, Monroe, Morganton, Newton, Pineville, Shelby, and Statesville.

direct testimony of Jason B. Nemeth, Director, Business Operations; and TVA filed the direct testimony of David B. DeHart, Program Manager, Renewable Energy.

On October 21, 2013, the Commission issued an Order Rescheduling Hearing, rescheduling the evidentiary hearing from November 6, 2013, to November 5, 2013.

On October 25, 2013, the Public Staff filed the testimony of Jay B. Lucas, Electric Engineer; the North Carolina Pork Council (Pork Council) filed the testimony of Angela W. Maier, Director of Policy Development and Communications; and the North Carolina Poultry Federation, Inc. (NCPF), filed the testimony of Summer Lanier, Public Relations Director, Prestage Farms, Inc.

On October 28, 2013, Green Energy Solutions NV, Inc., filed a written statement of position, but did not file testimony.

On November 1, 2013, the Power Agencies filed the rebuttal testimony of witness Fusco, and Fayetteville filed the rebuttal testimony of witness Lynch. Also on that date, Dominion filed a letter stating that it accepted Public Staff witness Lucas' recommendations to approve the relief requested in the Joint Motion subject to the conditions outlined in witness Lucas' testimony.

On November 5, 2013, the Commission issued an Order stipulating the testimony of Halifax witness Guerry and EnergyUnited witness Natt into evidence and excusing these witnesses from attending the hearing.

On November 5, 2013, the matter came on for hearing as scheduled. DEC and DEP presented the direct testimony of witness Byrd; TVA presented the direct testimony of witness DeHart; the Power Agencies presented the direct and rebuttal testimony of witness Fusco; Fayetteville presented the direct and rebuttal testimony of witness Lynch; the Pork Council presented the testimony of witness Maier; and the Public Staff presented the testimony of witness Lucas. The testimonies of GreenCo witness Nemeth, DNCP witness Muchhala, and NCPF witness Lanier were also stipulated into evidence and entered into the record at the opening of the hearing.

On November 12, 2013, DEC and DEP submitted a late-filed exhibit requested by Chairman Finley during the hearing.

On November 14, 2013, the Public Staff and NCMPA1 jointly submitted a late-filed exhibit requested by Chairman Finley during the hearing.

On November 26, 2013, NCPF and TVA each filed briefs. On November 27, 2013, the Power Agencies, the Public Staff, and the Joint Movants (excluding TVA) each filed proposed orders, the Pork Council filed a brief, and the North Carolina Sustainable Energy Association filed a letter supporting NCPF. Also on November 27, 2013, North Carolina Electric Membership Corporation filed a letter responding to the November 12, 2013 DEC/DEP late-filed exhibit.

On December 20, 2013, the Commission issued a Notice of Decision and Order stating that, due to the timing of the motions by the Joint Movants and the Power Agencies, it was not possible for the Commission to develop its complete order before the end of 2013, but that the Commission had made its decision in this docket. The Notice of Decision provided notice that the Commission would issue an order (1) delaying the 2013 requirements of G.S. 62-133.8(e) and (f), as established in the 2012 Delay Order, for one year; (2) requesting that the Public Staff arrange and facilitate two stakeholder meetings a year during 2014 and 2015; and (3) applying the triannual filing requirement first required by the 2012 Delay Order to DNCP, GreenCo, Fayetteville, EnergyUnited, Halifax, NCEMPA and NCMPA1.

The Notice of Decision and Order stated that a final Order, including findings of fact and conclusions, would be issued at a later date. The instant Order is that final Order, and the time for filing an appeal from the decision of the Commission shall begin to run on the date of issuance of this Order.

# **FINDINGS OF FACT**

1. The State's electric power suppliers have made a reasonable effort to comply with the 2013 statewide swine and poultry waste set-aside requirements established by G.S. 62-133.8(e) and G.S. 62-133.8(f), but will not be able to comply.

2. Compliance with the set-aside requirements has been hindered by the fact that the technology of power production from poultry and swine waste continues to be in its early stages of development.

3. Compliance with the set-aside requirements has been hindered in some respects, and promoted in other respects, by the General Assembly, which has modified the REPS on several occasions and considered other proposals for additional modifications. Legislative and regulatory developments have made new options for compliance available to electric power suppliers; on the other hand, because of periodic proposals for change, many lenders and investors perceive the future of the REPS as uncertain.

4. Electric power suppliers and renewable power developers have worked in good faith to resolve issues previously determined to have hindered compliance, such as negotiation of power purchase agreement terms and conditions and the cost and time required to properly interconnect poultry and swine waste generation facilities with the electric grid. Despite these efforts, and a decrease in problems regarding interconnection and contractual language, developers of waste-to-energy facilities and their lenders and investors remain cautious and slow to act.

5. No party presented evidence that the aggregate 2013 poultry and swine waste set-aside requirements could be met; nor did any party oppose Joint Movants' and Power Agencies' motions for relief from the 2013 poultry and swine waste set-aside requirements.

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6. It is in the public interest to delay required compliance by the State's electric power suppliers with the requirements of G.S. 62-133.8(e) and (f) for one year.

7. Although a few electric power suppliers indicated their ability to meet a pro-rata allocation of the statutory requirement, it is appropriate to delay the statutory deadlines of the poultry and swine waste set-aside requirements, not only for those electric power suppliers that have been unable to comply, but for all electric power suppliers.

8. Electric power suppliers that have acquired poultry and swine waste RECs for 2013 REPS compliance should be allowed to bank such RECs for poultry and swine waste set-aside requirement compliance in future years.

9. Electric power suppliers should continue to make efforts to purchase any reasonably-priced poultry and swine waste RECs available in order to support the construction and operation of poultry and swine waste generation facilities and to fulfill requirements pursuant to this Order.

10. DEC and DEP should continue to file the verified triannual progress reports required by Ordering Paragraph No.4 of the 2012 Delay Order, and DNCP, GreenCo, Fayetteville, EnergyUnited, Halifax and the Power Agencies should also file these reports. The Power Agencies should be permitted to file their reports jointly if they so desire. The filing of these progress reports should continue until the Commission orders that they be discontinued.

11. It is appropriate for the Public Staff to arrange and facilitate two stakeholder meetings a year during 2014 and 2015.

# EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT 1-6

The evidence supporting these findings of fact appears in the testimony of DEC/DEP witness Byrd, DNCP witness Muchhala, TVA witness DeHart, Fayetteville witness Lynch, Power Agencies witness Fusco, EnergyUnited witness Natt, Halifax witness Guerry, GreenCo witness Nemeth, NCPF witness Lanier, Pork Council witness Maier, and Public Staff witness Lucas.

DEC/DEP witness Byrd testified that DEC and DEP worked diligently to comply with the 2013 poultry and swine waste set-aside requirements. Witness Byrd stated that DEP had acquired enough poultry RECs to meet its 2013 poultry waste set-aside requirement. Witness Byrd further testified, however, that DEC could not comply with its 2013 poultry waste set-aside requirement and that neither company was able to meet the 2013 swine waste set-aside requirement. Witness Byrd stated that DEC and DEP remain in active ongoing negotiations for the purchase of in-state poultry and swine RECs; they continue to explore opportunities to secure out-of-state RECs; they maintain open solicitations for additional poultry and swine resources; and they are making good-faith efforts to assist developers with difficulties in interconnecting facilities to the grid. In addition, witness Byrd stated that DEC is continuing to engage in swine waste research through its support of the Loyd Ray Farms project.

Witness Byrd stated that DEC and DEP have found that the production of electricity from poultry and swine waste is technologically challenging; it is more expensive than other more common forms of renewable energy; and that swine farms are typically located in very remote and rural areas, making interconnection costly and difficult. Further, witness Byrd stated that poultry and swine waste developers have encountered difficulties in financing their projects, in obtaining long-term supplies of animal waste fuel, and in other areas. As a result, developers have frequently delayed their commercial operation dates or abandoned their contracts with DEC and DEP. Witness Byrd stated that Commission decisions interpreting the poultry waste set-aside requirement, and the General Assembly's enactment of legislation affecting the requirement, caused DEC and DEP to frequently pause and reconsider their poultry waste compliance strategy, resulting in the loss of time. Witness Byrd testified that, in spite of all these difficulties, many of the poultry and swine waste developers who are working with DEC and DEP have made great strides. The developers have been confronted with a host of practical problems, and, as they have learned how to deal with these problems, they have brought their projects closer to commercial operation.

DNCP witness Muchhala testified that DNCP has participated in the Swine Waste REC Buyers Group organized by the electric power suppliers in North Carolina, has solicited numerous REC marketers and brokers, and has conducted its own search to locate operational swine waste digesters anywhere in the United States. According to witness Muchhala, all these efforts have failed and DNCP has not been able to acquire any swine waste RECs. Witness Muchhala testified that, because DNCP is permitted by statute to rely entirely on out-of-state sources, DNCP has been able to purchase sufficient out-of-state poultry RECs to meet the requirements of the poultry waste set-aside. However, DNCP has contracted to provide REPS compliance services for the Town of Windsor, which is required to provide 75 percent of its RECs from in-state sources, and it has not found any in-state swine or poultry waste RECs; consequently, DNCP is unable to comply with either of the 2013 poultry and swine waste set-aside requirements on Windsor's behalf.

TVA witness DeHart testified that TVA made reasonable efforts to comply with the 2013 poultry and swine waste set-aside requirements. Witness DeHart stated that TVA met with other North Carolina electric power suppliers to discuss joint efforts to purchase poultry and swine waste RECs, and, TVA has solicited offers from waste-to-energy developers for RECs or generation to meet the poultry and swine waste set-aside requirements. Witness DeHart testified that, despite these efforts, TVA is unable to comply with the 2013 poultry and swine waste set-aside requirements.

Fayetteville witness Lynch testified that Fayetteville is participating in the electric power suppliers' joint request for proposals (RFP) seeking poultry waste REC sales contracts; it has issued a separate RFP for swine waste RECs, to which no responses were received; and it has diligently assessed the market for opportunities to acquire

poultry and swine waste RECs, but no such opportunities have been available. Witness Lynch's testimony as to whether Fayetteville will be able to meet the 2013 poultry and swine waste set-aside requirements was confidential.

Power Agencies witness Fusco testified that there is no reason to believe the State's electric power suppliers will be able to comply with the 2013 poultry and swine waste set-aside requirements. Witness Fusco stated that the Power Agencies, along with other electric power suppliers, entered into long-term swine REC purchase agreements with four counterparties; however, three of the counterparties repeatedly failed to meet the requirements of the agreements and the agreements were subsequently terminated. The contracts with the remaining counterparty are still in effect, but the project's commercial operation date has been significantly delayed and the projected output has been reduced. Witness Fusco further stated that the Power Agencies have continued to look, with limited success, for other suppliers that could provide swine waste RECs. They were able to purchase swine waste RECs from an out-of-state supplier; however, this supplier's registration as a renewable energy facility was subsequently revoked by the Commission and the RECs were invalidated. With respect to poultry waste, witness Fusco stated that the Power Agencies have contracted to purchase RECs from various counterparties. However, according to witness Fusco, some of these counterparties' projects have failed and the others have been delayed.

Witness Fusco testified that in his view the reasons for the Power Agencies' difficulties in obtaining poultry and swine waste RECs include: (1) the small number of participants in the market for swine waste RECs; (2) the fact that most of the swine waste market participants lack actual experience with biomass technologies; (3) the lack of a website where animal waste generation projects can easily be identified and contacted; (4) the financing difficulties encountered by developers of poultry waste generation; (5) uncertainties arising from environmental regulatory permitting issues relating to poultry waste; and (6) the continuing legislative and regulatory developments directly affecting the poultry waste set-aside. Witness Fusco noted that, although these legislative and regulatory developments have created uncertainty, they have also expanded the universe of compliance options, and the Power Agencies are seeking to make use of these options. On cross-examination, witness Fusco testified that the Power Agencies have contracted with developers managing the proposed ReVenture project, which was expected to come on line by the end of 2013. According to witness Fusco, if the Reventure project remains on schedule and is on line in 2014, the Power Agencies will be able to meet the requested modified requirements of the poultry waste set-aside for 2014.

EnergyUnited witness Natt stated that EnergyUnited has purchased out-of-state poultry and swine waste RECs, and, that it has engaged in collaborative efforts with other North Carolina electric power suppliers to obtain in-state RECs. His testimony on whether EnergyUnited will be able to comply with the 2013 poultry and swine waste set-aside requirements was confidential. Halifax witness Guerry did not appear at the hearing. Witness Guerry's testimony was admitted into the record pursuant to the Commission's November 5, 2013 Order. He testified that Halifax participated in the collaborative efforts of the State's electric power suppliers to obtain poultry and swine waste RECs, but, to date those efforts have been unsuccessful. Witness Guerry stated that Halifax entered into an individual agreement to purchase RECs from a swine waste-to-energy developer, however, this developer has not yet registered with the Commission as a renewable energy facility. Consequently, according to witness Guerry, Halifax is unable to meet the 2013 poultry and swine waste set-aside requirements.

GreenCo witness Nemeth testified that GreenCo has participated in the collaborative efforts of the State's electric power suppliers to obtain poultry and swine waste RECs, and in addition, GreenCo has had discussions with numerous developers seeking to produce power from animal waste. As a result of these discussions, GreenCo has purchased some swine waste RECs both in-state and out-of-state, and some out-of-state poultry waste RECs. However, according to witness Nemeth, GreenCo has not acquired enough RECs to meet the 2013 poultry and swine waste set-aside requirements.

NCPF witness Lanier testified that NCPF does not oppose the request for a delay of one year to the poultry waste set-aside requirements. Witness Lanier stated that her employer, Prestage Farms, Inc., is in the process of developing a poultry litter gasification facility in Bladen County. Witness Lanier listed the benefits of generating power from poultry litter, emphasizing that power generation will provide a beneficial use for poultry waste in the event that the current practice of land application is prohibited.

Pork Council witness Maier testified that, although the development of electric generation from swine waste has taken time, significant gains are being made. Witness Maier stated that there are six permitted projects in North Carolina, including a 1.3-MW facility being developed by Revolution Energy in the town of Magnolia, which is expected to be fully operational in November 2013. She noted that the use of swine waste for power generation provides an alternative to the disposition of waste in lagoons, which has disadvantages and resulted in a moratorium on the expansion of the hog industry in the State. Witness Maier stated that with the enactment of the swine waste set-aside requirement, the State's electric power suppliers were given the responsibility to actively support and assist in the development of energy production from swine waste. In witness Maier's opinion, this responsibility has not been fully embraced by all electric suppliers. She asserted that the electric suppliers should make greater efforts to ensure that the language of their REC purchase contracts does not place unreasonable burdens on developers. Finally, witness Maier recommended that the provision contained in the 2012 Delay Order, requiring DEC and DEP to file triannual progress reports, be made applicable to all of the State's electric power suppliers.

Public Staff witness Lucas testified that the Joint Movants' and the Power Agencies' motions should be granted because the electric power suppliers are unable to comply with the 2013 poultry and swine waste set-aside requirements. Witness Lucas stated that, even though DEC and DEP have not acquired enough poultry and swine waste RECs to meet the requirements, it is clear that they have made good-faith efforts to do so. Witness Lucas further stated his belief that the other electric power suppliers have made good-faith efforts to comply, but that he cannot say so with the same degree of certainty because the other suppliers have not been required to meet the same level of transparency and additional reporting requirements that DEC and DEP were required to adhere to pursuant to the 2012 Delay Order.

Witness Lucas further testified that at the hearing prior to the 2012 Delay Order, he identified several factors that made compliance with the set-asides difficult, including: (1) uncertainty as to the environmental requirements applicable to waste-to-energy facilities; (2) uncertainty arising from the numerous statutory amendments affecting the poultry waste set-aside; (3) disagreements between electric power suppliers and developers on contract terms, particularly those relating to change of law provisions; and (4) difficulties in reaching satisfactory interconnection agreements. Witness Lucas stated that uncertainty surrounding potential changes to the REPS statute continues to exist, while the uncertainty about environmental requirements has diminished to some degree because several waste-to-energy facilities have received rulings from the Division of Air Quality of the North Carolina Department of Environment and Natural Resources that they are not subject to the restrictions applicable to solid waste incinerators. Witness Lucas further stated that most of the contractual issues relating to change of law have largely been addressed and the difficulties with interconnection agreements have for the most part been resolved.

In its determination that the effective dates of the poultry and swine waste set-asides should again be delayed, the Commission initially notes that its authority under G.S. 62-133.8(i)(2) "to modify or delay the provisions of subsections (b), (c), (d), (e), and (f) of [G.S. 62-133.8) in whole or in part" may be exercised only if the electric power suppliers requesting the modification or delay "demonstrate that [they] made a reasonable effort to meet the requirements set out" in the statute. In this case, the evidence demonstrates that the electric power suppliers made reasonable efforts to comply with their 2013 poultry and swine waste set-aside requirements. However, no supplier is able to comply with the 2013 swine waste set-aside requirement and a limited few are in a position to comply with the 2013 poultry waste set-aside requirement. Witnesses Maier and Lucas expressed some concern as to whether certain suppliers' compliance efforts might have been more vigorous and extensive, but neither contended that any supplier failed to make a reasonable effort. The Commission concludes that the limited availability of poultry waste RECs, and the near unavailability of swine waste RECs, resulted in a scenario in which compliance could not be achieved. The primary cause of these limitations is the immature and undeveloped state of the technology of electric power generation from poultry and swine waste. Many states have adopted renewable energy portfolio standards, however, North Carolina is the only state with set-aside requirements for energy generated from swine or poultry

waste. Witnesses Byrd, Fusco and Nemeth testified that almost every developer that agreed to provide power from poultry or swine waste had to postpone startup dates or abandon the projects entirely.

The evidence shows little disagreement regarding other causes of the electric power suppliers' difficulty with compliance in 2013. Witnesses Byrd, Fusco and Lucas all noted that new legislative developments affecting the poultry waste set-aside have resulted in uncertainty and delays, although they have also provided suppliers with new ways of complying with the set-aside. Witness Lucas further testified that there have been disputes about the terms and conditions of REC purchase agreements and disagreements and misunderstandings as to the interconnection of facilities. The testimony of these witnesses was not contradicted by any party.

The Commission notes that despite setbacks, which are inevitable with the development of a new technology, several of the State's waste-to-energy developers are making significant strides. Witness Byrd testified that many developers have made significant progress and are close to having their facilities on line. Additionally, witness Byrd stated that DEP is in a position to comply with its 2013 poultry waste set-aside requirement. Witness Fusco stated that the ReVenture project was expected to begin producing poultry waste RECs by the end of 2013; witness Nemeth indicated that GreenCo is purchasing a small amount of in-state swine waste RECs; and witness Lanier testified that the Revolution Energy swine waste plant in Magnolia is scheduled to come on line in the near future.

# EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT 7-9

The evidence supporting these findings of fact appear in the testimony of DNCP witness Muchhala and Power Agencies witness Fusco.

DNCP witness Muchhala testified that, despite the fact that DNCP is in compliance with the 2013 poultry waste set-aside requirements and the Town of Windsor has acquired some poultry waste RECs, their compliance schedule should be delayed uniformly with the other electric power suppliers. Witness Muchhala further testified that DNCP should be allowed to bank its already acquired RECs for future use. Witness Muchhala contended that this approach maintains fairness among the electric power suppliers and is appropriate because the poultry waste set-aside requirement is a joint annual compliance requirement to be achieved by all the electric power suppliers.

Power Agencies witness Fusco testified that, if any electric power supplier is granted a delay to the 2013 poultry and swine waste set-aside requirements, the same relief should be granted to those electric power suppliers capable of whole or partial compliance. Witness Fusco stated that if suppliers that incurred costs in good faith to acquire poultry and swine waste RECs are required to retire those RECs in 2013, while those suppliers who acquired no RECs are excused from compliance, the practical effect is that the suppliers who purchased RECs will be penalized for good faith efforts to comply with the requirements.

No party offered testimony in opposition to the contentions of witnesses Muchhala and Fusco.

In the 2012 Delay Order the Commission modified the 2012 poultry and swine waste set-aside requirements uniformly for all parties, including those that were able to fully or partially comply with the set-asides, as well as those that had not acquired any swine or poultry waste RECs. Further, the Commission allowed parties that had acquired RECs to bank them for compliance in future years. The Commission directed all electric power suppliers to continue to make efforts to purchase any reasonably priced poultry and swine waste RECs that were available. These procedures are fair to all parties and are not opposed by any party to this proceeding. Further, the nature of the poultry and swine waste set-aside requirements, as aggregate requirements, would render compliance planning exceedingly complex were different electric power suppliers held to different compliance schedules. Consequently, the Commission will adopt the same procedures for use in this proceeding. However, the Commission notes that, as poultry and swine waste RECs become more readily available and more electric power suppliers are able to comply with the requirements, the Commission reserves the right to revisit the uniform application of compliance delays in potential future proceedings if the Commission finds it necessary to do so.

# EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT 10-11

The evidence supporting these findings of fact appear in the testimony of Public Staff witness Lucas, Pork Council witness Maier, Fayetteville witness Lynch, and Power Agencies witness Fusco.

Public Staff witness Lucas testified that the triannual progress reports, currently filed by DEC and DEP pursuant to Ordering Paragraph No. 4 of the Commission's 2012 Delay Order, should also be filed by DNCP, TVA, Fayetteville, the Power Agencies, and GreenCo. He stated that this requirement would provide greater transparency as to these suppliers' compliance efforts. On cross-examination and redirect, witness Lucas testified that the triannual progress reports should not only include the names of developers with whom a supplier has had discussions and the reasons why these discussions did or did not lead to a REC purchase contract, but should also include some degree of detail as to each developer's proposal. In witness Lucas' opinion, the preparation of an electric power supplier's initial progress report will require some effort. However, subsequent reports should be relatively easy to prepare since the electric power supplier can use its first report as a template and insert new information or delete outdated material as needed.

Pork Council witness Maier testified that the triannual reports should be filed by all electric power suppliers. Witness Maier stated that these reports include useful information about the suppliers' compliance efforts, provide additional incentive for the suppliers to focus on compliance with the poultry and swine waste set-asides, and give interested parties an opportunity to intercede if necessary. Further, witness Maier suggested that periodic stakeholder meetings would help reduce uncertainty by displaying a commitment on the part of developers and the electric power suppliers.

Power Agencies witness Fusco stated that he did not believe the electric power suppliers, other than DEC and DEP, should be required to file triannual reports. Witness Fusco stated that DEC and DEP agreed to file these reports in a settlement agreement in the 2012 proceeding. However, the other electric power suppliers were not parties to the settlement agreement and never agreed to file the reports. Witness Fusco stated that electric power suppliers already file annual compliance plans and compliance reports, and additional reporting requirements would be overly burdensome and would not produce any additional RECs. Witness Fusco stated that, in his opinion, the only obligation of the electric power suppliers under G.S. 62-133.8 is to acquire the number of RECs specified in the statute; they are not required to actively support and assist in the development of renewable energy.

On cross-examination, witness Fusco stated that the labor costs required to compile a triannual report and have it reviewed by the Power Agencies' legal staff would be significant, amounting to about \$1,000. He agreed that the triannual reports would help keep the Commission abreast of the electric power suppliers' compliance efforts and would provide the electric power suppliers with an opportunity to bring their concerns forward to the Commission. Witness Fusco stated that the Power Agencies' annual compliance reports and compliance plans are filed in September and their off-ramp motion this year was also filed in September. Witness Fusco acknowledged that for the rest of the year, if they are not required to file triannual reports, the Power Agencies will not make any information available about their compliance activities.

Fayetteville witness Lynch testified that Fayetteville should not be burdened with preparing triannual reports because it is a small supplier and its efforts to comply with the poultry and swine waste set-aside requirements are limited to participating in purchasing collaboratives. On cross-examination, witness Lynch agreed that swine and poultry production are important industries to the State's economy that produce an undesirable waste product, and that in enacting G.S. 62-133.8(e) and (f) the General Assembly hoped to create a way of disposing of this waste product while producing useful electric power. He further acknowledged that to achieve this goal the electric power suppliers and the waste-to-energy developers must cooperate in good faith, and, in particular, they must communicate with each other.

Whether to require triannual reports from electric power suppliers other than DEC and DEP is the only contested issue before the Commission in this proceeding. In this matter the Commission agrees with the Public Staff and the Pork Council. The triannual reports filed this year by DEC and DEP have been valuable to the Commission. The filing of similar reports by DNCP, GreenCo, Fayetteville, EnergyUnited, Halifax and the Power Agencies should likewise provide helpful information on their compliance activities; should help keep the Commission informed on whether progress is continuing toward making the generation of power from poultry and swine waste a practical reality; and should assist the Commission in ruling on similar future motions, if necessary. Further, the filing of triannual reports will provide regular notice to the Commission of electric power suppliers' compliance, or lack thereof, with the poultry and swine waste set-aside requirements, rather than the Commission relying upon the electric power suppliers to file motions for relief, which have occurred late in the calendar year.

As witnesses Fusco and Lynch pointed out, the electric power suppliers will incur some costs in preparing triannual reports; however, the Commission agrees with witness Lucas that a supplier's second and subsequent reports will be less time-consuming and expensive than its first one. The Commission does not find this to be an unreasonable expense for larger electric power suppliers. The Commission has taken the cost of the reports into account, however, in choosing to exempt the smallest suppliers from the reporting obligation.

Accordingly, the Commission concludes that DNCP, GreenCo, Fayetteville, EnergyUnited, Halifax and the Power Agencies, as well as DEC and DEP, should be required to file the verified triannual Progress Reports required by Ordering Paragraph No. 4 of the Commission's 2012 Delay Order. Further, the Public Staff is requested to arrange and facilitate two stakeholder meetings a year during 2014 and 2015 that shall be attended by the electric power suppliers that are subject to the triannual reporting requirement. The purpose of the stakeholder meetings is to encourage communication between electric power suppliers and developers and to discuss potential obstacles to achieving compliance with the poultry and swine waste set-aside requirements and options for addressing them.

IT IS, THEREFORE, ORDERED as follows:

1. That the 2013 requirement of G.S. 62-133.8(e), as established in the Commission's 2012 Delay Order, is delayed for one year. The electric power suppliers, in the aggregate, shall comply with the requirements of G.S. 62-133.8(e) according to the following schedule:

<u>Calendar Year</u>	Requirement for Swine Waste Resources
2014-2015	0.07%
2016-2018	0.14%
2019 and thereafter	0.20%

2. That the 2013 requirement of G.S. 62-133.8(f), as established in the Commission's 2012 Delay Order, is delayed for one year. The electric power suppliers, in the aggregate, shall comply with the requirements of G.S. 62-133.8(f) according to the following schedule:

<u>Calendar Year</u>	Requirement for Poultry Waste Resources
2014	170,000 megawatt-hours
2015	700,000 megawatt-hours
2016 and thereafter	900,000 megawatt-hours

3. That the Public Staff is requested to arrange and facilitate two stakeholder meetings a year during 2014 and 2015. The electric power suppliers that are subject to the triannual filing requirement (as discussed herein) shall attend. Developers and other stakeholders are encouraged to participate and discuss potential obstacles to achieving the swine and poultry waste requirements and options for addressing them.

4. That the triannual filing requirement first required by the Commission's 2012 Delay Order and that now applies to DEP and DEC shall apply to DNCP, GreenCo, Fayetteville, EnergyUnited, Halifax, NCEMPA and NCMPA1. The reports to be filed shall be due to the Commission on each May 1, September 1, and January 1, until the Commission finds that they are no longer necessary. The filing requirements shall be as specified in ordering paragraph 4 of the Commission's 2012 Delay Order.

ISSUED BY ORDER OF THE COMMISSION

This the <u>26<sup>th</sup></u> day of March, 2014.

NORTH CAROLINA UTILITIES COMMISSION

Paige & morvis

Paige J. Morris, Deputy Clerk

## STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. E-100, SUB 113

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## BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of Accounting Treatment for REC Sales

ORDER REGARDING ACCOUNTING

- TREATMENT
- FOR REC SALES

BY THE COMMISSION: On August 16, 2012, the Commission issued an Order Approving REPS and REPS EMF Riders and 2011 REPS Compliance in Docket No. E-7, Sub 1008. The proceeding involved Duke Energy Carolinas, LLC's application for a Renewable Energy and Energy Efficiency Portfolio Standard (REPS) cost recovery rider pursuant to G.S. 62-133.8 and Commission Rule 8-67. That Order discussed the sale of renewable energy certificates (RECs)<sup>1</sup> as follows:

[Public Staff] Witness Eastwood testified that in December 2010, Duke sold a small number of solar RECs to another entity. The Company indicated to the Public Staff that this sale was not reflected in the last REPS rider because the costs associated with these RECs were removed from the rider calculation and, as such, were never recovered from customers. According to witness Eastwood, Duke also stated that these RECs were never identified as cost-recovered in NC-RETS.

Witness Eastwood testified that the Public Staff has verified that the costs of these RECs were removed from the REPS EMF rider calculation in the Sub 984 proceeding (which used a test year that ended December 31, 2010). However, although the Company did not seek to recover the costs of the RECs in the REPS EMF rider, the RECs were initially bought by Duke to be used for REPS compliance as part of its regulated utility operations. Witness Eastwood stated that the gain on this sale was included in Duke's cost of service in its most recent general rate case (Docket No. E-7, Sub 989), rather than being flowed through the REPS rider. She further explained that Duke also sold wind RECs in March 2012 and applied the same treatment to those sales as it did to the

<sup>&</sup>lt;sup>1</sup> General Statute Section 62-133.8(a)(6) defines a renewable energy certificate as:

a tradable instrument that is equal to one megawatt hour of electricity or equivalent energy supplied by a renewable energy facility, new renewable energy facility, or reduced by implementation of an energy efficiency measure that is used to track and verify compliance with the requirements of this section as determined by the Commission. A "renewable energy certificate" does not include the related emission reductions, including, but not limited to, reductions of sulfur dioxide, oxides of nitrogen, mercury or carbon dioxide.

December 2010 sale of solar RECs. Witness Eastwood indicated that these sales raise two issues: how the gain that the Company received for the sale should be treated for ratemaking purposes, and how the RECs sold from its inventory should be identified for purposes of calculating the amount of the gain. Witness Eastwood stated that, consistent with the rationale of Commission decisions regarding the disposition of utility assets (for example, Order Ruling on Proper Accounting Treatment to Record the Transfer of Certain Utility Assets issued May 20, 1999, in Docket No. SP-122, Sub 0), the Public Staff generally believes that ratepayers should receive the gain associated with the sale of RECs that were initially bought to meet the Company's public utility obligations. The Public Staff's position is that if it were not for the Company's obligation to comply with G.S. 62-133.8, the Company would not have bought the RECs that it subsequently sold, and that the Company employees who processed these sales routinely charge their time to REPS.

During the hearing, [Duke] witness Felt testified that Duke sells RECs infrequently in response to requests from other electric power suppliers that need the RECs in order to comply with REPS. She stated that REC sales pose several issues for the Company, such as how to select the specific RECs to sell, how to price them, and how to account for the original purchase price as well as the gain on sale.

Witness Eastwood stated that the Public Staff believes that the issues regarding REC sales should be addressed generically. Duke witness Smith testified that she agrees with that approach.

Based on the testimony of witnesses Eastwood, Smith and Felt, the Commission concludes that it is appropriate and necessary to address the issue of REC sales in a generic docket. Therefore, the Commission will issue a separate order establishing a procedural schedule for the filing of comments on the issue of REC sales.

Subsequently, on September 17, 2012, the Commission issued an Order Requesting Comments Regarding Accounting Treatment for Transfers of Renewable Energy Certificates. The Commission asked parties to address the following questions:

- (1) how the gain that an electric power supplier receives from a REC sale should be treated for ratemaking purposes;
- (2) how the RECs to be sold should be selected;
- (3) how the sales price for RECs should be established; and
- (4) how the original purchase price of such RECs should be recorded.

On November 30, 2012, comments were filed by the following parties: Carolina Utility Customers Association, Inc. (CUCA); Dominion North Carolina Power (DNCP); Duke Energy Carolinas, LLC (DEC) and Progress Energy Carolinas, Inc. (now Duke

Energy Progress, Inc., or DEP); ElectriCities of North Carolina, North Carolina Municipal Power Agency Number 1, and North Carolina Eastern Municipal Power Agency (jointly the Power Agencies); and the Public Staff.

On January 10, 2013, DNCP filed a letter reiterating the "position as filed in its November 30, 2012 comments," in lieu of filing reply comments. On January 16, 2013, the Public Staff filed reply comments, as did DEC and DEP.

# <u>Issue 1:</u> How should the gain that an electric power supplier receives from a REC sale be treated for ratemaking purposes?

CUCA stated that any gains from the sale of RECs should be credited to ratepayers.

DNCP stated that the gain from the sale of RECs should be credited to the customers "if the underlying generation asset producing those RECs was paid for by customers." Similarly, DNCP stated that if an electric power supplier has "a surplus of RECs and sells some of those RECs" to another electric power supplier, any profit from the sale should be credited to customers, either through base rates or the REPS rider. However, DNCP stated that transaction costs and administrative costs should be subtracted from the sales proceeds before the proceeds are credited to customers.<sup>2</sup> DNCP stated that if the REC is generated by a new facility that the power supplier had itself built, "the North Carolina jurisdictional net proceeds from the sale (minus the incremental REC cost, transaction costs and administration costs) should be credited to customers ... to offset the capital and operating costs of the ... facility." DNCP noted that the RECs from a Company-owned facility might not qualify for North Carolina's REPS. Even so, stated DNCP, the sales proceeds from any RECs generated at such a facility should be credited to customers as an offset to the facility's capital and operating costs.

DEC/DEP stated that all cash proceeds, both gains and losses, of RECs that were purchased with funds collected via the REPS rider should flow back to customers via the REPS rider. In contrast, proceeds from the sale of RECs that were created by utility-owned assets that were built "before REPS" should flow back to customers "via base rates, not the REPS rider, since the REPS Rider was not utilized to recover the cost of purchasing [sic] those RECs initially."

The Power Agencies stated that

they are not subject to regulated ratemaking and accounting processes and it is unlikely that the Power Agencies would sell RECs to a third party. Thus, this issue does not have the same relevance to them as it would for other

<sup>&</sup>lt;sup>2</sup> In their reply comments, DEC/DEP agreed with DNCP that cash proceeds credited to customers through the REPS rider should be net of transaction costs, such as brokerage fees or registry export costs. The Public Staff stated that only incremental administrative and transaction costs should be subtracted from the sales proceeds, that is, "only costs that would not have been incurred in the absence of the sale."

electric suppliers. However, with regard to accounting methodologies related to the REPS cost cap and associated incremental costs, the Power Agencies continue to believe that the cost of RECs should be accounted for during the year in which the RECs are used for compliance purposes.<sup>3</sup>

The Public Staff stated that the Commission has no ratemaking authority over electric membership corporations and municipalities, so its comments on this question related only to electric public utilities. In addition, its comments were based on the assumption that all RECs acquired by these utilities were acquired for compliance with REPS.

The Public Staff cited the Commission's May 20, 1999 Order Ruling on Proper Accounting Treatment to Record the Transfer of Certain Utility Assets (Docket No. SP-122, Sub 0), which stated:

It is the general policy of the Commission that it is appropriate for ratepayers to receive the benefit of gains realized on the sale or transfer (disposition) of property which has been obtained by the utility in the course of providing public utility service ....

The Public Staff stated:

Any RECs acquired for compliance purposes have been acquired in the course of public utility operations; moreover, if the costs of acquisition are recovered through the REPS rider soon after the RECs are acquired, as is normally the case, ratepayers have already borne the acquisition costs. ... [A]ny proceeds realized on the sale of RECs should be ... flowed through the REPS rider as a reduction in compliance costs at the earliest opportunity.

In the alternative, proceeds from REC sales could be credited to customers during a general rate case, the Public Staff said. However, that approach presents difficulties because utilities do not file rate cases annually, and "intergenerational issues may arise, as the ratepayers who receive the proceeds of the sale may be different from the ratepayers who pay the cost of the REC that was sold." The Public Staff stated also that flowing the proceeds of a REC sale through a utility's next annual REPS rider "will help to keep the utility's costs below the annual cost cap" in G.S. 62-133.8(h).

DEC/DEP raised a related issue, specifically, whether customers were entitled to interest on rider charges for RECs that were ultimately sold, rather than used for REPS compliance. DEC/DEP stated that Commission Rule R8-67(e)(7) "was not intended to apply to sales from which proceeds flow to customers." That rule states:

<sup>&</sup>lt;sup>3</sup> The Commission addressed this issue in its May 3, 2011 Order on 2008 REPS Compliance Report (Docket No. E-48, Sub 6) in which it stated "that, for the purpose of filing REPS compliance reports and calculating total and incremental costs, electric power suppliers should report costs in the year in which such costs are incurred to acquire RECs and not in the year in which such RECs are used, or retired, for REPS compliance."

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

General Statute Section 62-130(e) states:

In all cases where the Commission requires or orders a public utility to refund moneys to its customers which were advanced by or overcollected from its customers, the Commission shall require or order the utility to add to said refund an amount of interest at such rate as the Commission may determine to be just and reasonable; provided, however, that such rate of interest applicable to said refund shall not exceed ten percent (10%) per annum.

In its reply comments, the Public Staff cited another rule, Rule R8-67(e)(10), which states:

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

In its reply comments, the Public Staff stated that, in its view:

the payment of such additional interest pursuant to subdivision (e)(10) would not be necessary or appropriate, as long as the proceeds or gains are subject to subdivision (e)(7), are reasonable and prudently incurred, and provide an economic benefit to the selling utility's ratepayers in terms of reducing the cost of compliance, taking into account the usefulness of the REC for compliance purposes at the time of sale.

In footnotes, the Public Staff added:

However, if the sale were to occur after the expiration of the seven-year limit (thus after the refund requirement had already been triggered), it would be appropriate for the requirements of Rule R8-67(e)(10) to apply to the refund.

It should be noted, however, that a sale that does not have a significant economic benefit to the ratepayers (for example, selling a REC at a loss simply because it has become of no or little worth to the utility in terms of meeting compliance requirements) would not justify the avoidance of the [Rule] R8-67(e)(10) requirement.

Continuing, the Public Staff stated:

With regard to the applicability of Rule R8-67(e)(7), a utility's gain on the sale of RECs is analogous to its gain on the sale of fuels, components of fuel-related costs, or by-products of the generation process. Under G.S. 62-133.2(a1)(8) and (9), G.S. 62-130(e), and Rule R8-55(d)(6), these gains must be passed through to customers with interest.

Again footnoting, the Public Staff added:

A utility's proceeds from or gain on sale of RECs will be added to its overcollection of REPS costs for the test period in a REPS rider proceeding, or netted against its undercollection. If there is a net overcollection, it will be refunded to ratepayers with interest under Rule R8-67(e)(7); if there is an undercollection, it will be recovered from ratepayers without interest.

In their joint reply comments, DEC/DEP agreed with the Public Staff's reply comments as to the applicability of Rule R8-67(e)(7).

DEC/DEP stated that there is a potential complication if the REC to be sold was bought in conjunction with purchased power,

the cost for which has been previously recovered through the fuel rider. Because the power and energy were consumed for the benefit of DEC's and PEC's customers and are not components of the subsequent REC sale, the Companies propose that the prior recovery of purchased power costs remain unaffected by any subsequent sale of associated RECs.

In their reply comments DEC/DEP outlined a scenario in which, they asserted, customers would benefit by the sale of RECs, even at a loss, if the utility was able to purchase replacement RECs that cost less than the proceeds from the REC sale.

The Companies note, and agree, that the original purchase price should not be included in the considerations. For example, the Companies may be able to sell a 2012 vintage REC for \$5 and acquire an otherwise similar replacement 2013 vintage REC for \$2. Assuming the 2012 vintage REC is not needed for compliance in 2012, customers benefit by realizing \$3 cash proceeds on the overall transaction as well as an extension of the REC's bankable life. ... [E]ven if the original purchase price of the 2012 vintage REC was \$10, customers would benefit from the overall transaction ... since the effective cost of the REC ultimately used for REPS compliance would be \$7 rather than \$10.

The Commission's rules regarding the REPS rider allow an electric public utility to forecast its anticipated REC costs and collect the revenues to cover those costs contemporaneously with its actual REC purchases.<sup>4</sup> If the utility does not buy as many RECs as it had planned to buy (or if the RECs simply cost less than was forecasted), Rule R8-67(e)(7) provides that the over-collections should be refunded to customers, with interest, via the REPS EMF rider that is established in the next annual rider proceeding.

The Commission finds that its current rules do not contemplate a scenario under which an electric public utility forecasts a need for RECs in order to comply with REPS, collects the funds for those REC purchases from customers via the REPS rider, buys the RECs, and then resells the RECs rather than using them for compliance. The Commission's orders adopting rules to implement Session Law 2007-397<sup>5</sup> simply did not address this issue. Because G.S. 62-133.8(a)(6) defines a REC as a "tradable" instrument, the Commission concludes that the General Assembly intended that electric power suppliers should be able to both buy and sell them. Finally, no party advocated that Rule R8-67(e)(7) should apply to REC sales.

Under the Public Staff and DEC/DEP's proposal, any proceeds from REC sales would be treated as though they were additional revenue from customers (either contributing to an over-collection of REPS rider moneys or reducing the amount of a REPS rider under-collection). While the Commission's rules do not explicitly provide for this approach, the Commission nonetheless finds that it is a reasonable way to handle the proceeds from REC sales.

#### Issue 2: How should the RECs to be sold be selected?

The Public Staff stated that it was important to address, in each instance, whether RECs should be sold at all. To that end, the Public Staff asserted:

- 1) If the utility needs the RECs for REPS compliance, they should not be sold, regardless of price.
- 2) Before selling any RECs, a utility should have sufficient RECs to meet its REPS obligations for the current year, "and should bank a sufficient number of RECs to provide for either possible changes in the requirements or disallowances of RECs."

<sup>&</sup>lt;sup>4</sup> For example, in DEC's REPS rider proceeding, Docket No. E-7, Sub 1034, the billing period was the 12 months ending August 31, 2014. Rates established by Order dated August 20, 2013, were to begin September 1, 2013, and were established such that DEC would recover its forecasted REC purchase costs during the same period.

<sup>&</sup>lt;sup>5</sup> See Orders dated February 29, 2008; March 13, 2008; and August 3, 2010 in Docket No. E-100, Sub 113.

- 3) A supplier should not sell swine or poultry waste RECs "until it can consistently meet North Carolina's requirements for these set-asides on an ongoing basis."
- 4) The sale of RECs is appropriate when it will reduce the overall cost to ratepayers.

The Public Staff further stated:

All other things being equal, it may be best for the utility to designate the oldest RECs on hand that are eligible for a particular transaction in order to minimize the possibility of violating the seven-year retirement deadline established by Commission Rule R8-67(e)(10).

In their initial comments, DEC/DEP stated that

the nature of the transaction drives the selection of RECs to be sold; thus selection is by the mutual discretion of buyer and seller. If all gains and losses flow to customers, the selection of particular RECs for a certain transaction should be inconsequential. ... [S]election should be restricted only by the vintage and category needs of the buyer. ... DEC or PEC [DEP] may be approached by a smaller compliance entity in the state with a need for a specific REC category and vintage. In such cases DEC or PEC [DEP], at its discretion, may sell RECs of the desired vintage and category.

DNCP stated that "the decision on which RECs to sell is based on whether the REC to be sold can produce more value for customers than the replacement REC needed, if at all, to meet DNCP's REPS compliance requirements."

Similarly, the Power Agencies stated that "the REC selection process should be left to the discretion of the electric supplier who [sic] is selling the RECs."

The Commission generally agrees with the criteria for reviewing REC sales that was outlined by the Public Staff. Because it is difficult to anticipate every possible scenario, the Commission will require electric public utilities to file complete information about each REC sale, along with an explanation as to why the sale was in the public interest. The Commission's findings of prudence would then occur on a case-by-case basis.

As regards the issue of selling RECs that were originally purchased as part of a bundled REC/energy purchase, the Commission agrees with DEC/DEP that there would generally be no need to revisit fuel rider revenues associated with the original purchase. However, the Commission will refrain from prejudging this issue and will instead require case-by-case review of each REC sale's prudency as discussed above.

#### Issue 3: How should the sales price for RECs sold to third parties be established?

The Public Staff stated that, in general, "the appropriate price for a sale of RECs is the market price – the price to which the buyer and seller agree."<sup>6</sup>

The Power Agencies said that the sales price should be "the agreed-upon transaction price resulting from arms-length negotiations between the electric supplier and a willing buyer ...."

DNCP stated that "the price is set by the market, including prices agreed to in bilateral contracts."

CUCA stated that the sale price for RECs should be based on the "then current market prices," noting that "the market price for RECs in North Carolina will be different than market prices established in other parts of the country." CUCA also stated:

The original price of the REC is the cost to generate the renewable power that comprises the REC, less the avoided cost of the utility.

In their reply comments, DEC/DEP stated that they

do not disagree with this comment ...; however, the comment does not wholly describe the original price of an unbundled REC (a REC purchased separate [sic] from the "green" energy). ... Commission Rule R8-67(e)(2) provides that, "The cost of an unbundled renewable energy certificate ... is an incremental cost and has no avoided cost component."

DEC/DEP previously stated in their initial comments:

Transaction prices should be determined by the mutual discretion of buyer and seller. The Companies will seek primarily to benefit its customers and to hold them harmless when engaging in REC transactions, while occasionally aiding smaller Load Serving Entities in their compliance efforts.

The Commission concludes that a REC sale, including the sales price, must be in the best interest of the electric power supplier's customers. It is possible that a specific REC sales price was not a fair market price or the result of an arms' length negotiation. The burden of demonstrating that a REC sales price was appropriate will fall on the selling utility, and that price will not be presumed to be appropriate simply because the buyer and seller were in agreement.

<sup>&</sup>lt;sup>6</sup> The Public Staff noted that REC sales between utility affiliates would be an exception. DEC/DEP stated that sales of RECs between DEC and DEP would be subject to the Regulatory Conditions and Code of Conduct as approved by the Commission in its Order Approving Merger Subject to Regulatory Conditions and Code of Conduct issued June 29, 2012 (Docket Nos. E-7, Sub 986 and E-2, Sub 998). In the case of REC sales between DEP and DEC, "the Companies propose this means REC transaction prices will be at the initial price paid for the transacted RECs."

#### Issue 4: How should the original purchase price of such RECs be recorded?

DEC/DEP stated that they "record the price paid as the cost for all RECs procured, regardless of whether or not RECs are subsequently sold."

The Power Agencies stated that the "original purchase price for a REC should be equal to the agreed-upon price resulting from arms-length negotiations."

Similarly, the Public Staff stated that "the utilities should continue to record the original purchase price of RECs as they now do."

The Commission agrees with the parties that there is no need or reason to restate the original purchase price of a REC that is subsequently resold.

In conclusion, the Commission generally agrees with the Public Staff and other parties as to how REC sales should be scrutinized and accounted for. Proceeds from REC sales should be credited to customers if the RECs were purchased with REPS rider proceeds, or if the RECs were produced via a generating facility that was paid for by customers. Since the Commission cannot anticipate every scenario, the Commission will review REC sales on a case-by-case basis in REPS rider proceedings and general rate cases, as the issues arise. The electric public utility will have the burden of proving that each REC sale was in the best interest of its customers and should file complete information regarding the original purchase price, resale price, the cost of replacement RECs and any incremental administrative costs or brokerage fees incurred pursuant to the transaction.

IT IS, THEREFORE, SO ORDERED.

ISSUED BY ORDER OF THE COMMISSION

This the  $\underline{13^{th}}$  day of May, 2014.

NORTH CAROLINA UTILITIES COMMISSION

Aail L. Mount

Gail L. Mount, Chief Clerk

# **APPENDIX 3**

### STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. E-100, SUB 130 DOCKET NO. RET-22, SUB 0 DOCKET NO SP-432, SUB 1 DOCKET NO SP-432, SUB 2 DOCKET NO SP-588, SUB 0 DOCKET NO SP-596, SUB 0 DOCKET NO SP-615, SUB 0 DOCKET NO SP-1224, SUB 0 DOCKET NO SP-1044, SUB 0 DOCKET NO SP-1045, SUB 0 DOCKET NO SP-1046, SUB 0 DOCKET NO SP-1558, SUB 0 DOCKET NO SP-733, SUB 0 DOCKET NO SP-785, SUB 0 DOCKET NO SP-785, SUB 1 DOCKET NO SP-785, SUB 10 DOCKET NO SP-785, SUB 11 DOCKET NO SP-785, SUB 12 DOCKET NO SP-785, SUB 13 DOCKET NO SP-785, SUB 14 DOCKET NO SP-785, SUB 15 DOCKET NO SP-785, SUB 16 DOCKET NO SP-785, SUB 17 DOCKET NO SP-785, SUB 18 DOCKET NO SP-785, SUB 19 DOCKET NO SP-785, SUB 2 DOCKET NO SP-785, SUB 20 DOCKET NO SP-785, SUB 21 DOCKET NO SP-785, SUB 22 DOCKET NO SP-785, SUB 23 DOCKET NO SP-785, SUB 24 DOCKET NO SP-785, SUB 3 DOCKET NO SP-785, SUB 4 DOCKET NO SP-785, SUB 5 DOCKET NO SP-785, SUB 6 DOCKET NO SP-785, SUB 7 DOCKET NO SP-785, SUB 8 DOCKET NO SP-785, SUB 9 DOCKET NO SP-1971, SUB 0 DOCKET NO SP-1153, SUB 1 DOCKET NO SP-1205, SUB 0 DOCKET NO SP-1224, SUB 1

DOCKET NO SP-1244, SUB 0 DOCKET NO SP-1341, SUB 3 DOCKET NO SP-1364, SUB 0 DOCKET NO SP-1368, SUB 0 DOCKET NO SP-1378, SUB 0 DOCKET NO SP-1398, SUB 0 DOCKET NO SP-1434, SUB 1 DOCKET NO SP-1440, SUB 1 DOCKET NO SP-1514, SUB 0 DOCKET NO SP-1515, SUB 0 DOCKET NO SP-1517, SUB 0 DOCKET NO SP-1526, SUB 0 DOCKET NO SP-1565, SUB 7 DOCKET NO SP-1565, SUB 9 DOCKET NO SP-1571, SUB 0 DOCKET NO SP-1572, SUB 0 DOCKET NO SP-1577, SUB 0 DOCKET NO SP-1602, SUB 0 DOCKET NO SP-1658, SUB 0 DOCKET NO SP-1707, SUB 0 DOCKET NO SP-1757, SUB 0 DOCKET NO SP-1817, SUB 0 DOCKET NO SP-1839, SUB 0 DOCKET NO SP-1877, SUB 0 DOCKET NO SP-1902, SUB 0 DOCKET NO SP-2066, SUB 0 DOCKET NO SP-725, SUB 0 DOCKET NO SP-823, SUB 0 DOCKET NO SP-446, SUB 0 DOCKET NO SP-1154, SUB 0 DOCKET NO SP-1484, SUB 0

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of	)	
Revocation of Registration of Renewable	)	ORDER REVOKING REGISTRATION
Energy Facilities and New Renewable	)	OF RENEWABLE ENERGY
Energy Facilities Pursuant to	)	FACILITIES AND NEW RENEWABLE
Rule R8-66(f) – 2013	)	ENERGY FACILITIES

BY THE COMMISSION: On August 28, 2013, the Commission issued an Order giving notice of its intent to revoke the registration of 226 new and renewable energy facilities because their owners had not completed or filed the annual certifications required each April 1 as detailed in Commission Rule R8-66(b). According to Commission records, and records maintained in North Carolina Renewable Energy Tracking System (NC-RETS), the owners of the 72 new and renewable energy facilities listed in

Appendices A and B did not complete their annual certifications on or before October 1, 2013, as required by the Commission's August 28, 2013 Order, nor has an annual certification been completed for these facilities as of the date of this Order.

The Commission, therefore, finds good cause to revoke the registrations for the 72 facilities listed in Appendices A and B effective October 1, 2013.

IT IS, THEREFORE, ORDERED as follows:

1. That the registrations previously approved by the Commission for the 72 facilities listed in Appendices A and B shall be, and are hereby, revoked effective October 1, 2013.

2. That the NC-RETS Administrator shall not allow the owners of the facilities listed in Appendices A and B to establish those facilities as "projects" in NC-RETS.

3. That the NC-RETS Administrator shall not allow any NC-RETS account holder to import from the facilities listed in Appendices A and B renewable energy certificates (RECs) that are dated October 2013 or later.

4. That any RECs dated October 2013 or later earned by one of the facilities listed in Appendices A and B whose registration has been revoked pursuant to this Order are ineligible to be used by an electric power supplier for compliance with the Renewable Energy and Energy Efficiency Portfolio Standard.

5. That in the future, should the owner of a facility whose registration has been revoked pursuant to this Order wish to have the energy output from its facility become eligible for compliance with the Renewable Energy and Energy Efficiency Portfolio Standard, the owner must again register the facility with the Commission.

6. That the Administrator of NC-RETS shall post a copy of this Order on the home page of the NC-RETS web site.

7. That the Chief Clerk shall serve a copy of this Order on all of the parties in Docket No. E-100, Sub 113.

ISSUED BY ORDER OF THE COMMISSION.

This the  $17^{\text{th}}$  day of December, 2013.

NORTH CAROLINA UTILITIES COMMISSION

Aail L. Mount

Gail L. Mount, Chief Clerk

Revocation of Registered Facilities (NC-RETS Participants)		
Docket Number	Facility Owner	State
RET-22, Sub 0	ST Silver Bluff, LLC	NC
SP-432, Sub 1	Madison County Public Schools	NC
SP-432, Sub 2	Madison County Public Schools	NC
SP-588, Sub 0	Frazier Jr.; Ronald C	NC
SP-596, Sub 0	Brinton; Jonathan	NC
SP-615, Sub 0	Escobar; Caroline M.	NC
SP-1224, Sub 0	Crow Creek Golf Club, LLC	NC

	Revocation of Registered Facilities (Non NC-RETS Participants)	
Docket Number	Facility Owner	State
SP-1044, Sub 0	Tioga Solar I, LLC	CA
SP-1045, Sub 0	Tioga Solar VII, LLC	CA
SP-1046, Sub 0	Tioga Solar IX, LLC	CA
SP-1558, Sub 0	SunRun Solar Owner II, LLC	CA
SP-733, Sub 0	SPG Solar I LLC	CA
SP-785, Sub 0	SPP Fund II, LLC	CA
SP-785, Sub 1	SPP Fund II, LLC	CA
SP-785, Sub 10	SPP Fund II, LLC	CA
SP-785, Sub 11	SPP Fund II, LLC	CA
SP-785, Sub 12	SPP Fund II, LLC	CA
SP-785, Sub 13	SPP Fund II, LLC	CA
SP-785, Sub 14	SPP Fund II, LLC	CA
SP-785, Sub 15	SPP Fund II, LLC	CA
SP-785, Sub 16	SPP Fund II, LLC	CA
SP-785, Sub 17	SPP Fund II, LLC	CA
SP-785, Sub 18	SPP Fund II, LLC	CA
SP-785, Sub 19	SPP Fund II, LLC	CA
SP-785, Sub 2	SPP Fund II, LLC	CA
SP-785, Sub 20	SPP Fund II, LLC	CA
SP-785, Sub 21	SPP Fund II, LLC	CA
SP-785, Sub 22	SPP Fund II, LLC	CA
SP-785, Sub 23	SPP Fund II, LLC	CA
SP-785, Sub 24	SPP Fund II, LLC	CA
SP-785, Sub 3	SPP Fund II, LLC	CA
SP-785, Sub 4	SPP Fund II, LLC	CA
SP-785, Sub 5	SPP Fund II, LLC	CA
SP-785, Sub 6	SPP Fund II, LLC	CA
SP-785, Sub 7	SPP Fund II, LLC	CA
SP-785, Sub 8	SPP Fund II, LLC	CA
SP-785, Sub 9	SPP Fund II, LLC	CA
SP-1971, Sub 0	Young; Carlton Quint	FL
SP-1153, Sub 1	Steve Mason Enterprises, Inc.	NC
SP-1205, Sub 0	Spectrum Building Company, Inc.	NC
SP-1224, Sub 1	Crow Creek Golf Club, LLC	NC
SP-1244, Sub 0	Sawmill Solar Portfolio, LLC	NC

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SP-1341, Sub 3	Eagle Electron Power Partners, Inc	NC
SP-1364, Sub 0	ESA Solar Pavilion, LLC	NC
SP-1368, Sub 0	Commercial Solar Applications, LLC	NC
SP-1378, Sub 0	UREV Solar, LLC	NC
SP-1398, Sub 0	GWSJ, LLC	NC
SP-1434, Sub 1	Sommerville, Mark Lee	NC
SP-1440, Sub 1	Pope; John	NC
SP-1514, Sub 0	Berwald; Greg	NC
SP-1515, Sub 0	Gerhart; Jeff	NC
SP-1517, Sub 0	Old Beech Mountain Solar Plant, LLC	NC
SP-1526, Sub 0	Adams, Martin and Associates PA	NC
SP-1565, Sub 7	ESA Renewables IV, LLC	NC
SP-1565, Sub 9	ESA Renewables IV, LLC	NC
SP-1571, Sub 0	Cane Creek Solar Company	NC
SP-1572, Sub 0	Charlotte Motor Speedway Solar Plant, LLC	NC
SP-1577, Sub 0	Airfield Solar Plant, LLC	NC
SP-1602, Sub 0	Pristine Sun Fund 3, LLC	NC
SP-1658, Sub 0	Red Toad III, LLC	NC
SP-1707, Sub 0	Seagrove Foods, Inc.	NC
SP-1757, Sub 0	URENEW Solar, L.L.C.	NC
SP-1817, Sub 0	Tower Solar Farm, LLC	NC
SP-1839, Sub 0	The Boathouse at FSV, LLC	NC
SP-1877, Sub 0	Exhibit Court Solar, LLC	NC
SP-1902, Sub 0	Atlantic Corporation of Wilmington, Inc.	NC
SP-2066, Sub 0	Plummer; Nicholas	NC
SP-725, Sub 0	Frank and Robin Ann Southecorvo	NC
SP-823, Sub 0	Edson; Ben	NC
SP-446, Sub 0	Tatanka Wind Power, LLC	ND/SD
SP-1154, Sub 0	Green Gas Pioneer Crossing Energy, LLC	PA
SP-1484, Sub 0	R1 Solar	SC

## STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. SP-2422, SUB 1

# BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of	
Application of Clean Energy, LLC, for	) ORDER AMENDING REGISTRATION
Registration of a New Renewable Energy	) OF NEW RENEWABLE ENERGY
Facility	) FACILITY

BY THE CHAIRMAN: On January 4, 2013, Clean Energy, LLC (Clean Energy), filed a registration statement pursuant to Commission Rule R8-66 for a new renewable energy facility to be located in Charlotte in Mecklenburg County, North Carolina. Clean Energy stated that its 1.6-MW<sub>AC</sub> biomass-fueled combined heat and power (CHP) facility would generate electricity through the pyrolysis of wood. Clean Energy stated that its facility would begin operations on or around January 15, 2013.

On August 9, 2013, the Commission issued an Order Accepting Registration of New Renewable Facility, accepting the registration statement filed by Clean Energy for its biomass-fueled CHP facility located in Charlotte in Mecklenburg County, North Carolina as a new renewable energy facility.

On August 28, 2013, Clean Energy filed a letter with Commission stating that the facility will be located in ReVenture Park, a cleanfields renewable energy demonstration park as designated by the Secretary of State. Clean Energy's letter included a copy of the Secretary of State's designation.

Pursuant to the Commission's March 11, 2013 Order on Request for Declaratory Ruling, in Docket No. SP-100, Sub 30, renewable energy certificates (RECs) eligible for triple credit pursuant to S.L. 2010-195, as amended by S.L. 2011-279, may be earned from the electric generation and the thermal energy produced from the capture and use of waste heat at a biomass-fueled combined heat and power facility located in a cleanfields renewable energy demonstration park and registered with the Commission as a new renewable energy facility. Such RECs will be recorded in the North Carolina Renewable Energy Tracking System (NC-RETS) and marked as originating from either (1) the first 10 MW of generating capacity in a cleanfields energy demonstration park and eligible for additional credits to meet the poultry waste set-aside of G.S. 62-133.8(f), or (2) the second 10 MW of generating capacity in a cleanfields energy demonstration park and eligible for additional general biomass credits. The Commission stated that, if necessary, the allocation method of RECS between the first and second 10 MW of generating capacity will be determined during the registration of a facility in a cleanfields renewable energy demonstration park as a new renewable energy facility.

Based upon entire record in this proceeding, the Chairman finds good cause to amend the registration of Clean Energy's biomass-fueled CHP facility to identify that the new renewable energy facility is located in a cleanfields renewable energy demonstration park and to order that all RECs derived from the 1.6-MW<sub>AC</sub> facility should be recorded by the NC-RETS Administrator as originating from the first 10 MW of generating capacity eligible for triple credit pursuant to S.L. 2010-195, as amended by S.L. 2011-279. The Commission notes that following the issuance of this Order, 8.4 MW of generating capacity remains that may be designated by the Commission as generating RECS to be marked as originating from the first 10 MW of generating capacity, and 10 MW of generating capacity remains that may be designated by the Commission as generating RECS to be marked as originating from the second 10 MW of generating capacity for triple credit pursuant to S.L. 2010-195, as amended by S.L. 2011-279.

IT IS, THEREFORE, SO ORDERED.

ISSUED BY ORDER OF THE COMMISSION.

This the  $\underline{20^{\text{th}}}$  day of December, 2013.

NORTH CAROLINA UTILITIES COMMISSION

Aail L. Mount

Gail L. Mount, Chief Clerk

## STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. SP-2014, SUB 1

#### BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of	
Application of REI 2, LLC, for Registration of a	
New Renewable Energy Facility	

) ORDER ACCEPTING REGISTRATION
) OF NEW RENEWABLE ENERGY
) FACILITY

BY THE CHAIRMAN: On May 22, 2013, as amended January 16, 2014, REI 2, LLC (REI 2), filed a registration statement pursuant to Commission Rule R8-66 for a new renewable energy facility to be located in Charlotte in Mecklenburg County, North Carolina. REI 2 stated that its 1.9-MW<sub>AC</sub> Directed Biogas-fueled combined heat and power (CHP) facility would generate electricity utilizing landfill methane. REI 2 stated that its facility would begin operations in January, 2014.

The filing included certified attestations that: 1) the facility will be in substantial compliance with all federal and state laws, regulations, and rules for the protection of the environment and conservation of natural resources; 2) the facility will be operated as a new renewable energy facility; 3) REI 2 will not remarket or otherwise resell any renewable energy certificates (RECs) sold to an electric power supplier to comply with G.S. 62-133.8; and 4) REI 2 will consent to the auditing of its books and records by the Public Staff insofar as those records relate to transactions with North Carolina electric power suppliers.

On March 24, 2014, the Public Staff filed the recommendation required by Commission Rule R8-66(e) stating that REI 2's registration statement as a new renewable energy facility should be considered to be complete.

On May 1, 2014, REI 2 filed a letter with Commission stating that the facility will be located in ReVenture Park, a cleanfields renewable energy demonstration park as designated by the Secretary of State. REI 2's letter included a copy of the Secretary of State's designation.

The Commission's March 21, 2012 Order on Request for Declaratory Ruling in Docket No. SP-100, Sub 29, defined Directed Biogas as:

A fuel derived from a renewable energy resource as defined by, or as declared by Commission order pursuant to, G.S. 62-133.8(a)(8), cleaned to pipeline quality, injected into the pipeline system, and nominated for an

electric generation facility within the State of North Carolina or for a facility located outside the State where the electricity generated is delivered to a public utility that provides electric power to retail electric customers in the State.

The Commission determined that Directed Biogas, as defined above, was a renewable energy resource pursuant to G.S. 62-133.8(a)(8). Additionally, the Commission stated:

To the extent that the biogas is derived from both renewable energy resources and nonrenewable energy resources, the Facility utilizing Directed Biogas to generate electricity would earn RECs "based only upon the energy derived from renewable energy resources in proportion to the relative energy content of the fuels used," as provided in Commission Rule R8-67(d)(2). Similarly, if the Facility utilizes a fuel other than Directed Biogas, it may earn RECs only for that portion of the electricity derived from a renewable energy resource

Pursuant to the Commission's March 11, 2013 Order on Request for Declaratory Ruling in Docket No. SP-100, Sub 30, renewable energy certificates (RECs) eligible for triple credit pursuant to S.L. 2010-195, as amended by S.L. 2011-279, may be earned from the electric generation and the thermal energy produced from the capture and use of waste heat at a biomass-fueled combined heat and power facility located in a cleanfields renewable energy demonstration park and registered with the Commission as a new renewable energy facility. Such RECs will be recorded in the North Carolina Renewable Energy Tracking System (NC-RETS) and marked as originating from either (1) the first 10 MW of generating capacity in a cleanfields energy demonstration park and eligible for additional credits to meet the poultry waste set-aside of G.S. 62-133.8(f), or (2) the second 10 MW of generating capacity in a cleanfields energy demonstration park and eligible for additional general biomass credits. The Commission stated that, if necessary, the allocation method of RECS between the first and second 10 MW of generating capacity will be determined during the registration of a facility in a cleanfields renewable energy demonstration park as a new renewable energy facility.

Based upon entire record in this proceeding, the Chairman finds good cause to accept the registration of REI 2's Directed Biogas-fueled CHP facility. Pursuant to Rule R8-67(d)(2), the facility shall only earn RECs based upon the energy derived from renewable energy resources in proportion to the relative energy content of the fuels used. Additionally, the Chairman finds good cause to identify that the new renewable energy facility is located in a cleanfields renewable energy demonstration park and to order that all RECs derived from the 1.9-MW<sub>AC</sub> facility should be recorded by the NC-RETS Administrator as originating from the first 10 MW of generating capacity eligible for triple credit pursuant to S.L. 2010-195, as amended by S.L. 2011-279. The Commission notes that following the issuance of this Order, 6.5 MW of generating capacity remains that may be designated by the Commission as generating RECS to be marked as originating from the first 10 MW of generating capacity, and 10 MW of generating capacity remains that may be designated by the Commission as generating.

RECS to be marked as originating from the second 10 MW of generating capacity for triple credit pursuant to S.L. 2010-195, as amended by S.L. 2011-279.

IT IS, THEREFORE, SO ORDERED.

ISSUED BY ORDER OF THE COMMISSION.

This the  $\underline{5^{th}}$  day of May, 2014.

NORTH CAROLINA UTILITIES COMMISSION

Hail L. Mount

Gail L. Mount, Chief Clerk

## STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. E-100, SUB 130

#### BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of	
Revocation of Registration of Renewable	) ORDER GIVING NOTICE OF INTENT
Energy Facilities and New Renewable	) TO REVOKE REGISTRATION OF
Energy Facilities Pursuant to	) RENEWABLE ENERGY FACILITIES
Rule R8-66(f) - 2014	) AND NEW RENEWABLE ENERGY
	) FACILITIES

BY THE COMMISSION: Pursuant to Commission Rule R8-66(b), for renewable energy certificates (RECs) earned by a facility to be eligible for use by an electric power supplier in North Carolina for compliance with the Renewable Energy and Energy Efficiency Portfolio Standard (REPS), the owner of the facility shall register it with the Commission as a renewable energy facility or new renewable energy facility and is thereafter required to file an annual certification. Each Commission order approving the registration of a renewable energy facility or new renewable energy facility states that the owner of the facility shall annually file the information required by Commission Rule R8-66 on or before April 1 of each year. Specifically, Commission Rule R8-66(b)(7) states that annual certifications are due April 1 of each year and that owners of facilities that are registered as projects in the North Carolina Renewable Energy Tracking System (NC-RETS) may complete their annual certification electronically via the NC-RETS system. Pursuant to Commission Rule R8-66(f), failure to file an annual certification may result in the revocation of a facility's registration.

According to records maintained in NC-RETS, 11 renewable energy facilities and/or new renewable energy facilities registered in NC-RETS (listed in Appendix A of this Order) have not completed the on-line annual certification that was due April 1, 2014. In addition, 180 renewable energy facilities and/or new renewable energy facilities that are registered with the Commission but that are not registered as projects in NC-RETS (listed in Appendix B of this Order) have not filed with the Commission the annual certification that was due April 1, 2014.

The Commission finds good cause to notice its intent to revoke, as of October 15, 2014, the registration of any facility listed in Appendix A of this Order, unless the owner of the facility completes the on-line certification on or before that date. Further, the Commission finds good cause to notice its intent to revoke, as of October 15, 2014, the registration of any facility listed in Appendix B of this Order, unless the owner of the facility files the verified certification required by Rule R8-66(b) (attached as Appendix C of this Order) on or before that date. Finally, the Commission concludes that it is appropriate to waive the 2014 annual certification requirement in

Rule R8-66(b) for recently-registered facilities that received orders approving registration after January 1, 2014.

IT IS, THEREFORE, ORDERED as follows:

1. That the Commission shall issue orders revoking the registration of any renewable energy facilities and/or new renewable energy facilities listed in Appendix A as of October 15, 2014, unless the owner of the facility completes the on-line certification required by Rule R8-66(b) on or before that date.

2. That the Commission shall issue orders revoking the registration of any renewable energy facility and/or new renewable energy facility listed in Appendix B as of October 15, 2014, unless the owner of the facility files the verified certification required by Rule R8-66(b) (attached as Appendix C of this Order) on or before that date.

3. That the NC-RETS Administrator shall not import any RECs from a renewable energy facility or new renewable energy facility listed in Appendix B until the owner of the facility has filed with the Commission the certification required by Rule R8-66(b) and this Order.

4. That the Chief Clerk shall serve a copy of this Order on the owner of each facility listed in Appendices A and B by certified mail, return receipt requested.

5. That the Chief Clerk shall distribute a copy of this Order to all of the parties in Docket No. E-100, Sub 113.

ISSUED BY ORDER OF THE COMMISSION.

This the  $9^{th}$  day of September, 2014.

NORTH CAROLINA UTILITIES COMMISSION

Paige L. morris

Paige J. Morris, Deputy Clerk

Registered Facilities Pending Revocation (NC-RETS Participants)		
Docket Number	Facility Owner	State
SP-311, Sub 0	Hoosier Hydroelectric, Inc.	NC
SP-634, Sub 1	Bend of Ivy Lodge	NC
SP-716 Sub 0	ABCZ Solar, LLC	NC
SP-1015, Sub 1	Commonwealth Brands, Inc.	NC
SP-1060, Sub 1	Friendship Renewable Energy Project. LLC	NC
SP-1279, Sub 0	Old Dominion Freight Line, Inc.	NC
SP-1391, Sub 1	Tencarva Machinery Company	NC
SP-1535, Sub 0	James Ewell Jackson	NC
SP-1652, Sub 0	Rock Solar Energy Plant, LLC	NC
SP-1785, Sub 0	Russell D. & Leslie J. Young	NC
SP-2117, Sub 0	Verano Properties, LLC	NC

Reg	sistered Facilities Pending Revocation (Non NC-RETS Participants)	
Docket Number	Facility Owner	State
SP-1761, Sub 0	Tuskegee Solar Services, LLC	AL
SP-1022, Sub 0	Sun Edison SD, LLC	CA
SP-1082, Sub 0	GCL Eastside, LLC	CA
SP-1175, Sub 0	GCL Highland, LLC	CA
SP-1176, Sub 0	GCL Antelope Valley, LLC	CA
SP-1177, Sub 0	GCL AV Adult, LLC	CA
SP-1179, Sub 0	GCL Lancaster, LLC	CA
SP-1180, Sub 0	GCL Quartz Hill, LLC	CA
SP-1181, Sub 0	GCL Palmdale, LLC	CA
SP-1182, Sub 0	GCL Little Rock, LLC	CA
SP-1183, Sub 0	GCL Desert Winds, LLC	CA
SP-1184, Sub 0	GCL Knight, LLC	CA
SP-1049, Sub 0	Green Energy Partners, LLC	GA
EMP-64, Sub 0	New Harvest Wind Project, LLC	IA
SP-674, Sub 0	Exelon Solar Chicago, LLC	IL
EMP-50, Sub 0	Streator-Cayuga Ridge Wind Power, LLC	IL
EMP-33, Sub 0	Smoky Hills Wind Project II, LLC	KS
EMP-39, Sub 0	Smoky Hills Wind Farm, LLC.	KS
SP-1616, Sub 0	Ecocorp Inc.	MD
EMP-35, Sub 0	Farmers City Wind, LLC	MO
EMP-43, Sub 0	Moraine Wind II, LLC	MN
EMP-44, Sub 0	Moraine Wind, LLC	MN
EMP-45, Sub 0	MinnDakota Wind, LLC	MN
RET-27, Sub 0	Gaston County Schools	NC
SP-203, Sub 1	Aquesta Bank	NC
SP-203, Sub 2	Aquesta Bank	NC
SP-265, Sub 1	Jenkins; William Thomas	NC
SP-275, Sub 1	Holt Family Farm Power; Jefferson Holt DBA	NC
SP-341, Sub 0	FLS Solar 10, LLC	NC
SP-341, Sub 1	FLS Solar 10, LLC	NC
SP-432, Sub 3	Madison County Public Schools	NC
SP-432, Sub 4	Madison County Public Schools	NC
SP-605, Sub 1	Samuel B. Moore	NC

SP-605, Sub 3	Samuel B. Moore	NC
SP-665, Sub 0	SEMPRIUS, Inc.	NC
SP-677, Sub 0	Renewable Energy Business Group, Inc.	NC
SP-716, Sub 0	ABCZ Solar, LLC	NC
SP-719, Sub 0	Sunstruck Energy, LLC	NC
SP-779, Sub 0	Grandfather Mountain Stewardship	NC
	Foundation, Inc.	
SP-791, Sub 0	Richard Harkrader	NC
SP-804, Sub 1	510 REPP One, LLC	NC
SP-815, Sub 0	Jamie & Amy Ager	NC
SP-833, Sub 0	Tony Smith	NC
SP-833, Sub 1	Tony Smith	NC
SP-844, Sub 1	Tropical Nut & Fruit Co.	NC
SP-967, Sub 0	Raleigh Steam Producers, LLC	NC
SP-991, Sub 0	MP Wilson, LLC	NC
SP-1039, Sub 0	New World Renewable Energy Leasing, Inc.	NC
SP-1039, Sub 2	New World Renewable Energy Leasing, Inc.	NC
SP-1081, Sub 0	McDowell Green Energy, LLC	NC
SP-1122, Sub 0	NC-CHP Owner I, LLC	NC
SP-1204, Sub 0	Solar Noir, LLC	NC
SP-1246, Sub 0	Coutu; Stephen and AJ	NC
SP-1278, Sub 1	Altadore Investments LLC	NC
SP-1308, Sub 1	Effect Energy, Inc	NC
SP-1321, Sub 1	Due; Steven A.	NC
SP-1375, Sub 0	Wright of Thomasville	NC
SP-1383, Sub 1	Morrissey; Michael T.	NC
SP-1396, Sub 0	Conrad Energy, LLC	NC
SP-1399, Sub 1	Innovative Solar Systems 1, LLC	NC
SP-1415, Sub 1	Ray Family Farms, LLC	NC
SP-1454 Sub 3	City of Charlotte	NC
SP-1490, Sub 1	North Kannapolis Baptist Church	NC
SP-1550 Sub 0	Pierre & Nancy Burke	NC
SP-1568 Sub 0	Plymouth Splar, LLC	NC
SP-1596 Sub 0	PCSP3 Airport, LLC	NC
SP-1623, Sub 0	North Cargo Building, LLC	NC
SP-1635, Sub 0	Vale Farm, LLC	NC
SP-1665, Sub 0	Neuse River Solar Farm II, LLC	NC
SP-1676, Sub 0	Airport Ground Solar 1, LLC	NC
SP-1690, Sub 0	Solar Specialization & Technologies, LLC	NC

SP-1706, Sub 1	Innovative Solar 3, LLC	NC
SP-1708, Sub 0	Highland Brewing Solar, LLC	NC
SP-1720, Sub 0	North Carolina Solar II, LLC	NC
SP-1723, Sub 1	Innovative Solar 2, LLC	NC
SP-1724, Sub 1	Innovative Solar 6, LLC	NC
SP-1725, Sub 1	Innovative Solar 7, LLC	NC
SP-1740, Sub 1	Frame; Darrell	NC
SP-1754, Sub 0	Alamance Community College	NC
SP-1793, Sub 1	Innovative Solar 4, LLC	NC
SP-1810, Sub 0	Sanford Solar, LLC	NC
SP-1846, Sub 1	Trenton Farm, LLC	NC
SP-1900, Sub 0	Wake Tech Innovations, Inc.	NC
SP-1979, Sub 0	Manway Solar, LLC	NC
SP-1980, Sub 0	Gainey Solar, LLC	NC
SP-1989, Sub 0	ESA Newton Grove 1NC, LLC	NC
SP-2001, Sub 3	Energy United Electric Membership	NC
SP-2001, Sub 4	Corporation Energy United Electric Membership Corporation	NC
SP-2001, Sub 5	Energy United Electric Membership Corporation	NC
SP-2029, Sub 1	Frank L. Van Buren	NC
SP-2041, Sub 0	Mount Olive Solar, LLC	NC
SP-2068, Sub 1	All States Medical Supply, Inc.	NC
SP-2094, Sub 1	Town of Cary	NC
SP-2104, Sub 0	Hoffman and Hoffman, Inc.	NC
SP-2119, Sub 0	John I Howell, III	NC
SP-2164, Sub 0	Wake Solar, LLC	NC
SP-2165, Sub 0	Biscoe Solar, LLC	NC
SP-2166, Sub 0	Rockwell Solar, LLC	NC
SP-2167, Sub 0	Selma Solar, LLC	NC
SP-2168, Sub 0	Turkey Branch Solar, LLC	NC
SP-2170, Sub 1	Irwin Funderburk	NC
SP-2185, Sub 0	Southeastern Freight Lines, Inc.	NC
SP-2211, Sub 0	Chinquapin Solar, LLC	NC
SP-2220, Sub 0	Kevin Dougherty	NC
SP-2222, Sub 1	Tyson Furniture	NC
SP-2224, Sub 0	Alesia & Perry Dickerson	NC
SP-2233, Sub 0	Kenansville Solar 2, LLC	NC

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SP-2239, Sub 0	TelExpress, Inc.	NC
SP-2239, Sub 1	TelExpress, Inc.	NC
SP-2273, Sub 1	Wayne Solar I, LLC	NC
SP-2281, Sub 1	Wayne Solar II, LLC	NC
SP-2283, Sub 0	Derrell Harman	NC
SP-2298, Sub 0	Sampson Solar, LLC	NC
SP-2299, Sub 0	Anderson Solar, LLC	NC
SP-2302, Sub 0	DD Fayetteville Solar NC, LLC	NC
SP-2314, Sub 0	Harrell's Hill Solar Center, LLC	NC
SP-2316, Sub 2	Duplin Solar I, LLC	NC
SP-2317, Sub 0	Snow Hill Solar, LLC	NC
SP-2320, Sub 0	Michael Patrick Rooney	NC
SP-2322, Sub 0	Pine Street Solar, LLC	NC
SP-2342, Sub 0	Adventure Solar, LLC	NC
SP-2347, Sub 0	J.T. Hobby & Son, Inc.	NC
SP-2350, Sub 0	Radiant Solar at Pumpkin Patch Mountain, LLC	NC
SP-2351, Sub 0	Radiant Solar at Sharp Top, LLC	NC
SP-2354, Sub 0	West Wayne Solar, LLC	NC
SP-2356, Sub 0	Samarcand Solar Farm, LLC	NC
SP-2359, Sub 1	Wayne Solar III, LLC	NC
SP-2364, Sub 0	Onslow Energy, LLC	NC
SP-2378, Sub 0	James & Julia Barham	NC
SP-2401, Sub 1	Tier One Solar, LLC	NC
SP-2410, Sub 0	Kenansville Solar Farm, LLC	NC
SP-2413, Sub 0	Pitt Electric, Inc.	NC
SP-2430, Sub 0	Karl Vondracek	NC
SP-2453, Sub 0	Montgomery Solar, LLC	NC
SP-2459, Sub 0	Laurinburg Farm, LLC	NC
SP-2463, Sub 0	Soluga Farms II, LLC	NC
SP-2487, Sub 0	George & Sharon Edenfield	NC
SP-2500, Sub 0	Windsor Solar, LLC	NC
SP-2502, Sub 1	Maria E. Blanco & William C. Black	NC
SP-2513, Sub 1	Joseph M. Degulis	NC
SP-2533, Sub 1	Franchesca N. Colloredo & Rudolph Colloredo-Mansfeld	NC
SP-2561, Sub 0	Town of Mars Hill	NC
SP-2576, Sub 1	John Mayfield	NC
SP-2606, Sub 1	Sean Adams	NC
SP-2635, Sub 0	Lawrence M Papula	NC

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SP-2662, Sub 0	Redmon Solar Farm, LLC	NC
SP-2736, Sub 0	Ashley Solar Farm, LLC	NC
SP-2816, Sub 0	Mark Rufty	NC
SP-2820, Sub 0	South Atlantic Services, Inc.	NC
SP-2820, Sub 1	South Atlantic Services, Inc.	NC
SP-2826, Sub 1	Charles R. Hayes	NC
SP-2830 Sub 0	Martin Creek Farm, LLC	NC
SP-2871, Sub 0	349 Cayuga, LLC	NC
SP-2875, Sub 0	Terry Rushing	NC
SP-2879, Sub 0	Sustainable Solar, LLC	NC
SP-2899, Sub 0	Sara Lavelle	NC
SP-2910, Sub 2	SolNCPower1, LLC	NC
SP-2910, Sub 3	SolNCPower1, LLC	NC
SP-2921, Sub 0	Bladenboro Farm 2, LLC	NC
SP-2925, Sub 0	Yanceyville Farm 3, LLC	NC
SP-2951, Sub 0	Sam Huang	NC
SP-3050, Sub 0	Admark Graphic Systems, Inc.	NC
SP-3062, Sub 0	Coastal Beverage Company, Inc.	NC
SP-3220 Sub 0	SolNCPower2, LLC	NC
SP-2795, Sub 0	Ampersand Mt. Ida Hydro, LLC	NY
EMP-67, Sub 0	South Chestnut, LLC	PA
SP-1336, Sub 0	Wisniewski; Raymond	PA
SP-1770, Sub 0	Emm; Thomas A.	PA
SP-578, Sub 0	Green Energy Solutions NV, Inc.	SC

# Annual Certification for Renewable Energy Facility Registration

Facility Name: \_\_\_\_\_

Facility NCUC Docket No.: \_\_\_\_\_

I certify that the facility is in substantial compliance with all federal and state laws, regulations, and rules for the protection of the environment and conservation of natural resources.
I certify that the facility satisfies the requirements of G.S. 62-133.8(a)(5) or (7) as a $O$ renewable energy facility, or $O$ new renewable energy facility,
and the facility will be operated as a $O$ renewable energy facility, or $O$ new renewable energy facility.
I certify that 1) my organization is not simultaneously under contract with NC GreenPower to sell our RECs emanating from the same electricity production being tracked in NC-RETS; and 2) any renewable energy certificates (whether or not bundled with electric power) sold to an electric power supplier to comply with G.S. 62-133.8 have not, and will not, be remarketed or otherwise resold for any other purpose, including another renewable energy portfolio standard or voluntary purchase of renewable energy certificates in North Carolina (such as NC GreenPower) or any other state or country, and that the electric power associated with the certificates will not be offered or sold with any representation that the power is bundled with renewable energy certificates.
I certify that I consent to the auditing of my organization's books and records by the Public Staff insofar as those records relate to transactions with North Carolina electric power suppliers, and agree to provide the Public Staff and the Commission access to our books and records, wherever they are located and to the facility.
I certify that the information provided is true and correct for all years that the facility has earned RECs for compliance with G.S. 62-133.8.
I certify that I am the owner of the renewable energy facility or am fully authorized to act on behalf of the owner for the purpose of this filing.

Name (print) \_\_\_\_\_

Title \_\_\_\_\_

Facility Owner \_\_\_\_\_

Phone Number \_\_\_\_\_

# VERIFICATION

STATE OF \_\_\_\_\_\_ COUNTY OF \_\_\_\_\_

\_\_\_\_\_\_, personally appeared before me this day and, being first duly sworn, says that the facts stated in the foregoing certification and any exhibits, documents, and statements thereto attached are true as he or she believes.

WITNESS my hand and notarial seal, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_,

My Commission Expires: \_\_\_\_\_

Signature of Notary Public

Name of Notary Public – Typed or Printed

The name of the person who completes and signs the certification must be typed or printed by the notary in the space provided in the verification. The notary's name must be typed or printed below the notary's seal. This original verification must be affixed to the original certification, and a copy of this verification must be affixed to each of the 15 copies that are also submitted to the Commission at:

Chief Clerk's Office North Carolina Utilities Commission 4325 Mail Service Center Raleigh, North Carolina 27699-4325