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, 2012 SUBMITTED: SEPTEMBER 27, 2012

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.

2011-12 Legislation

The 2011-2012 General Assembly enacted four amendments to Senate Bill 3. First, Session Law 2011-55 (Senate Bill 75) amended G.S. 62-133.8(a) by adding a new subdivision, (3a), defining "electricity demand reduction" and amending G.S. 62-133.8(b)(2) and G.S. 62-133.8(c)(2) to include "electricity demand reduction," as newly defined by the legislation, as a means by which an electric power supplier can meet its REPS obligation.

Second, Session Law 2011-279 (Senate Bill 484) amended Session Law 2010-195. Session Law 2010-195, passed by the 2010 General Assembly, provided that energy produced at a "cleanfields renewable energy demonstration park" as defined in the Session Law, would receive triple credit towards renewable energy certificates (RECs) for the first 20 megawatts (MW) built; and provided that the additional credits would be both eligible, and first used, to fulfill the REPS poultry waste set-aside obligations created by G.S. 62-133.8(f). Senate Bill 484 limited the application of additional RECs to the poultry waste set-aside to the first 10 MW built.

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

Finally, Session Law 2011-394 (House Bill 119) amended G.S. 62-133.8(g) by exempting a biomass combustion facility that qualifies as a new renewable energy facility as defined in G.S. 62-133.8(a)(5)b from the requirement that the State conduct a case-by-case determination of, and require a subsequent permit condition for, Best Available Control Technology.

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 October 1, 2011:

 On August 24, 2010, the Commission issued an Order in Docket No. E-100, Sub 113, requesting comments on issues regarding measurement and verification (M&V) documentation. Numerous parties filed comments and reply comments in October and November of 2010. An additional issue was raised by the parties in their filings; the question of whether to establish an M&V advisory group and require electric power suppliers to jointly select a third party auditor. On May 14, 2012, the Commission issued an Order in Docket No. E-100, Sub 113, in response to the filed comments and reply comments, 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 an M&V plan if one is not already filed with the Additionally. amendment Commission. the added reporting requirements to the REPS compliance reports for electric membership corporations (EMCs) regarding energy efficiency (EE) and implementation of M&V plans.

- 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 previously existing requirements 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 to be provided in the application 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. These amendments are intended to expedite revisions conducted by other State agencies, such as the Department of Environment and Natural Resources (DENR).
- On May 16, 2012, the Commission issued an Order in Docket No. E-100, Sub 113, requiring that all electric power suppliers that serve retail customers in North Carolina submit an update regarding their plans for meeting the swine waste and poultry waste set-asides in the REPS. On June 1, 2012, a group of electric power suppliers filed a Joint Motion to modify and delay the swine waste and poultry waste set-aside requirements in G.S. 62-133.8(e) and (f). In response to the motion, on June 21, 2012, the Commission issued an Order scheduling a hearing on the matter, requesting testimony, and allowing intervenors to file testimony. On July 17, 2012, the Petitioners filed an Amended Joint Motion. The Amended Joint Motion clarified that the Petitioners were requesting that the Commission delay the Petitioners' need to comply with the swine waste and poultry waste set-asides until 2014, a two-year delay. The Commission received testimony and rebuttal testimony from several parties and intervenors. A hearing was held by the Commission on August 28, 2012. The matter is still pending before the Commission.

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 August 6, 2012, the Commission has accepted registration statements filed by 587 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, 2011, addressing issues related to the registration of a facility, such as the definition of "renewable energy resource," including the following:

- On October 21, 2011, in Docket Nos. RET-11, Sub 0, et al., the Commission issued an Order accepting the registrations of nine solar thermal facilities. The Commission concluded that the use of RETScreen software to estimate energy produced 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 Order allowed estimates of usage based on metering to earn RECs for the facilities in months prior to the installation of meters; however, only those RECs earned after the installation of the meter would be eligible to meet the solar set-aside requirement.
- On December 22, 2012, in Docket No. RET-28, Sub 0, the Commission denied the registration of a concentrated solar power 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 used to pre-heat the feed water entering the biomass-fueled boiler. 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.
- On May 3, 2011, and on March 8, 2012, the Commission issued Orders in Docket Nos. EMP-49, Sub 0, and EMP-61, Sub 0, respectively, granting CPCNs and accepting the registrations for a 300-MW land-based wind facility in Pasquotank and Perquimans Counties, and an 80-MW land-based wind facility in Beaufort County.

- On March 21, 2012, in Docket No. SP-100, Sub 29, the Commission issued an Order declaring directed biogas from a renewable resource injected into a natural gas pipeline to be a renewable energy resource. The Commission 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."
- On August 10, 2012, in Docket No. SP-729, Sub 1, the Commission issued an Order on a request for a declaratory ruling that established the following: 1) reinforced existing policy that only net electricity would be eligible for the issuance of RECs; 2) clarified that the definition of "station service" used to determine net output included all electric demand consumed at the generation facility that would not occur but for the generation itself, including, but not limited to, lighting, office equipment, heating, and air-conditioning at the facility; 3) reiterated that delivery of electricity to an electric power supplier was not a prerequisite for energy to be eligible for RECs; and finally 4) noticed the intent to revoke the registration of the CHP facility in question because, while it used a renewable energy resource and produced thermal energy, it consumed all the electricity that it generated, thus it did not produce "useful and measurable CHP" as required by G.S. 62-133.8(a)(7)(b). On September 17, 2012, the Commission issued an Order in the same docket that stated that a facility could not give away electricity "free of charge" to a third party with which it has other existing and future financial arrangements and avoid regulation as a public utility as defined in G.S. 62-3(23)a.1.
- On September 26, 2012, in Docket No. E-100, Sub 130, the Commission issued an Order revoking the registrations of ten new renewable energy facilities for failure to file their annual certifications as required by Commission Rule R8-66(b).

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 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.

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 and 2011 REPS solar set-aside 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 DENR in preparing its report and to include any public comments received regarding direct, secondary, and cumulative environmental impacts of the implementation of the REPS requirements of Senate Bill 3. The Commission has not identified, nor has it received from the public or DENR, any comments regarding direct, secondary, and cumulative environmental impacts of the implementation of the REPS provision of Senate Bill 3. DENR stated that there continues to be interest in the development of renewable energy resources ranging from wind farms to biomass combustion 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. 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

Progress Energy Carolinas, Inc. (PEC)

On June 3, 2011, PEC filed its 2010 REPS compliance report in Docket No. E-2, Sub 1000. In its 2010 REPS compliance report, PEC indicated that it acquired sufficient solar RECs to meet the 2010 requirement of 0.02% of its 2009 retail sales. In addition, a hearing was held on PEC's 2010 REPS compliance report and 2011 REPS cost recovery rider on September 27, 2011. On November 10, 2011, the Commission issued an Order approving PEC's REPS rider. The Commission approved a REPS rider of \$0.56 per month for the residential class per customer account; \$6.72 per month for the commercial class per customer account; and \$45.52 per month for the industrial class per customer account. In the same Order the Commission approved PEC's 2010 Compliance Report.

On June 4, 2012, in Docket No. E-2, Sub 1020, PEC filed its annual REPS compliance report and application for approval of its REPS cost recovery rider pursuant to G.S. 62-133.8 and Rule R8-67. PEC proposed to implement the following total REPS rates effective for service rendered on and after December 1, 2012: \$0.42 per month for residential customers; \$7.28 per month for general service/lighting customers; and \$34.33 per month for industrial customers. In its 2011 REPS compliance report, PEC indicated that it acquired sufficient solar RECs to meet the 2011 requirement of 0.02% of its 2010 retail sales (7,816 RECs). PEC indicated that it will be able to comply with the 2012 solar set-aside (0.07% of 2011 retail sales), but will be unable to meet its 2012 swine waste and poultry waste set-aside requirements. A hearing was held on PEC's 2011 REPS compliance report and 2012 REPS cost recovery rider on September 18, 2012. A final decision is pending before the Commission.

On September 4, 2012, PEC filed its 2011 REPS compliance plan in Docket No. E-100, Sub 137, as part of its 2012 Integrated Resource Plan (IRP). In its plan, PEC indicated that its overall compliance strategy to meet the REPS requirements consisted of the following: (1) PEC ownership of, or purchases from, new renewable energy generation; (2) the use of renewable energy resources at generating facilities; (3) purchases of RECs; and (4) implementation

of EE measures. PEC has agreed to provide REPS compliance services for the following wholesale customers, as allowed under G.S. 62-133.8(c)(2)(e): the towns of Black Creek, Lucama, Sharpsburg, Stantonsburg, and the city of Waynesville. PEC has adopted a competitive bidding process for the purchase of energy and/or RECs from renewable energy facilities whereby market participants have an opportunity to propose projects on a continuous basis.

PEC 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 photovoltaic (PV) programs. PEC has maintained a commercial PV program since July 2009, with the target of adding 5 MW of solar PV per year. PEC's primary strategy for compliance with the swine waste set-aside requirement was to jointly procure energy derived from swine waste resources with other electric power suppliers. In a recent settlement agreement in Docket No. E-100, Sub 113, PEC indicated that Duke and PEC would begin to search for resources outside of the collaborative effort. In regards to compliance with the REPS poultry waste set-aside, PEC stated that in July, 2010, it joined with other electric suppliers and issued a joint request for proposals (RFP). PEC has joined the Amended Joint Motion for delay of the swine waste and poultry waste resource requirements until 2014 in Docket No. E-100, Sub 113. A hearing was held on the Amended Joint Motion on August 28, 2012.

PEC intends to comply with a portion of the general REPS requirement via energy savings from its EE programs. Based on its current contracts, EE programs and banked RECs, PEC believes that it has procured sufficient resources to meet its general REPS obligation.

Duke Energy Carolinas, LLC (Duke)

On March 12, 2012, in Docket No. E-7, Sub 1008, Duke filed its 2011 REPS compliance report and an application for approval of a REPS rider to be effective September 1, 2012. The request sought to establish a REPS rider of \$0.22 per month for residential customers, \$3.29 per month for general service customers (the Duke equivalent of commercial class customers), and \$20.29 per month for industrial customers, each of which is below the incremental cost cap established in G.S. 62-133.8(h). In its 2011 compliance report Duke indicated that it had acquired sufficient solar RECs to meet the 2011 requirement of 0.02% of its 2010 retail sales. Duke indicated that it will be able to comply with the 2012 solar set-aside (0.07% of 2011 retail sales), but will be unable to meet its 2012 swine waste and poultry waste set-aside requirements. A hearing was held on Duke's REPS rider on June 12, 2012. On August 12, 2012, the Commission issued an Order approving a REPS rider of \$0.21 per month for residential customers; \$3.18 per month for general service customers; and \$19.61 per month for industrial customers, each of which is below the incremental cost cap established in G.S. 62-133.8(h). In the same Order the Commission approved Duke's 2011 compliance report and retired the RECs in Duke's 2011 compliance sub account in NC-RETS.

On September 4, 2012, Duke filed its 2012 REPS compliance plan in Docket No. E-100, Sub 137, as part of its 2012 IRP. In its plan, Duke stated that it is pursuing REPS compliance by building a diverse portfolio of cost-effective renewable energy and EE resources. The key components of Duke's plan include: (1) introduction of EE programs; (2) purchases of unbundled RECs; (3) continued operations of company-owned renewable energy facilities; and (4) research studies to enhance its ability to comply in the future. Duke has agreed to provide REPS compliance services for the following wholesale customers, as allowed under G.S. 62-133.8(c)(2)(e): Rutherford EMC; Blue Ridge EMC; the cities of Concord, Dallas, Forest, and Kings Mountain; and the Town of Highlands. Duke stated that it is confident that it will meet its solar set-aside requirement under its 2012 REPS obligation. Duke stated that it has been unable to secure sufficient RECs to satisfy its swine waste set-aside requirements in 2012 and 2013, and that it may be able to meet its 2014 requirement. Additionally, Duke stated that it will not be unable to secure enough RECs to meet its poultry waste set-aside requirements in 2012 and 2013, and that compliance in 2014 is unlikely. Duke has joined an Amended Joint Motion for delay of both the swine waste and poultry waste resource requirements until 2014. A hearing was held on the Amended Joint Motion on August 28, 2012.

Duke intends to meet the general REPS requirement in 2012, 2013, and 2014 with EE savings, hydroelectric power, biomass resources, out-of-state wind RECs, and solar resources. Duke projects that it will utilize EE savings to meet 25% of its general REPS requirements, the maximum percentage allowable under the statute. Duke plans to use hydroelectric power from three sources to meet the general REPS requirement: (1) small Duke-owned hydroelectric stations; (2) wholesale customers' SEPA allocations; and (3) hydroelectric facilities that have received Qualifying Facility status. Duke stated that it is evaluating a variety of biomass proposals, including landfill gas, CHP facilities, and biomass combustion facilities. Duke also plans to meet a portion of the general requirement with RECs from wind facilities, noting that land-based facilities could appear in North and South Carolina in the next decade, and that out-of-state RECs are available. Finally, Duke stated that it plans to meet a portion of the general requirement with RECs from solar facilities. Duke stated that the downward trend in solar equipment and installation costs over the past several years is a positive development, and that while some uncertainty exists over supportive policies and future cost declines, Duke fully expects solar resources to contribute to its compliance efforts beyond the solar set-aside. Based on its compliance plan, which Duke describes as a diversified balance of renewable resources. Duke asserts that it will be able to meet its general REPS obligation through 2014.

Dominion North Carolina Power (Dominion)

On August 25, 2011, in Docket No. E-22, Sub 475, Dominion filed its 2010 REPS compliance report. Dominion has also agreed to provide REPS

compliance services for the Town of Windsor. Dominion stated that it met its 2010 REPS solar set-aside obligation by purchasing unbundled out-of-state solar RECs. For the Town of Windsor's obligation, at least 75% of the RECs purchased were in-State RECs as required by G.S. 62-133.8(b)(2)(e). On December 15, 2011, the Commission issued an Order approving Dominion's 2010 REPS compliance report and requesting that Dominion file a verified attestation of Windsor's 2009 retail sales and the status of that information with NC-RETS.

On August 10, 2012, in Docket No. E-22, Sub 486, Dominion filed its 2011 REPS compliance report. Dominion stated that it met its 2010 REPS solar set-aside obligation by purchasing unbundled out-of-state solar RECs. For the Town of Windsor's obligation, at least 75% of the RECs purchased were in-State RECs, as required by G.S. 62-133.8(b)(2)(e). Dominion stated that it will not be able to meet the swine waste set-aside requirements in G.S. 62-133.8(e) and doubts that any swine waste renewable energy facilities will be in operation by 2013. Dominion further stated that because it can acquire out-of-state poultry RECs it will be able to fulfill its poultry waste set-aside requirement for the Town of Windsor, the maximum allowed by the statute, through out-of-state RECs. Dominion has joined the Amended Joint Motion in Docket No. E-100, Sub 113, to delay the poultry waste and swine waste set-aside requirements until 2014.

On August 31, 2012, in Docket No. E-100, Sub 137, Dominion filed its 2012 REPS compliance plan as part of its 2012 IRP. In its plan, Dominion stated that it intends to meet its general REPS requirements through the use of new company-generated renewable energy where economically feasible, EE, and unbundled RECs. Dominion reiterated its responsibility to meeting the REPS requirements for its wholesale customer the Town of Windsor. Dominion used unbundled solar RECs to meet its 2011 solar requirements and has entered into contracts to purchase sufficient RECs through 2014 to fully satisfy the solar set-aside requirement. Dominion reiterated that it is participating with other electric power suppliers to evaluate proposals from swine waste and poultry waste energy suppliers to meet the swine waste and poultry waste set-aside requirements, but doubts that it will be able to comply with the 2012 and 2013 swine waste set-aside requirements. Dominion will be able to meet its 2012-2014 poultry waste REPS requirements, as well as 25% (out-of-state) of the Town of Windsor's. However, as noted above, Dominion has joined the Amended Joint Motion for delay of both the swine waste and poultry waste resource requirements until 2014. Dominion did not file an application for a REPS rider in 2011 and has again elected not to file an application for a REPS rider in 2012.

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. (GreenCo), and the fifty-one municipal members of the power agencies to file through NCEMPA and NCMPA1.

GreenCo Solutions, Inc. (GreenCo)

On September 1, 2010, in Docket No. E-100, Sub 128, GreenCo filed its 2010 REPS compliance plan and 2009 REPS compliance report with the Commission on behalf of its member EMCs. GreenCo's report stated, among other points, that it had secured adequate resources to meet its solar set-aside obligation for 2010. On February 20, 2012, the Commission issued an Order approving GreenCo's 2009 compliance report. The Order also requested that GreenCo develop work papers documenting energy savings reported in its 2009 compliance report and that the Public Staff summarize these in its comments on GreenCo's 2010 compliance report.

On September 19, 2011, in Docket No. E-100, Sub 128, GreenCo filed its 2011 REPS compliance plan and 2010 REPS compliance report with the Commission on behalf of its member EMCs, as well as Mecklenburg Electric Cooperative and Broad River Electric Cooperative. In its 2010 REPS compliance report, GreenCo stated that it secured adequate resources to meet the solar set-aside obligation for 2010. Lastly, for 2010, the REPS incremental costs incurred by GreenCo's members were significantly less than the costs allowed under the per-account cost cap in G.S. 62-133.8(h). The Commission issued an Order on May 14, 2012, retiring the RECs in GreenCo's 2010 compliance sub-accounts. The Commission issued an Order on May 30, 2012, approving GreenCo's 2011 compliance plan.

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 member EMCs, as well as Mecklenburg Electric Cooperative and Broad River Electric Cooperative. In its plan, GreenCo stated that it intends to use its members' allocations from the Southeastern Power Administration (SEPA), RECs purchased from both in-State and out-of-state renewable energy facilities, and EE savings from eleven recently approved EE programs to meet its members' REPS

obligations. GreenCo stated that despite its continued work in collaborative efforts with other electric power suppliers to meet the swine waste and poultry waste set-aside REPS requirements that it does not anticipate complying until 2014. GreenCo has joined 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. In its 2011 REPS compliance report, GreenCo stated that it secured adequate resources to meet the solar set-aside obligation for 2011. Lastly, for 2011, the REPS incremental costs incurred by GreenCo's members were significantly less than the costs allowed under the per-account cost cap in G.S. 62-133.8(h).

EnergyUnited Electric Membership Corporation (EnergyUnited)

On August 30, 2011, in Docket No. E-100, Sub 128, EnergyUnited filed its 2011 IRP and REPS compliance plan and 2010 REPS compliance report with the Commission. In its report, EnergyUnited stated that it met its 2010 solar set-aside requirement. In its 2011 compliance plan, EnergyUnited stated that it has purchased enough solar RECs to meet its 2011 obligation. The Commission issued an Order on May 14, 2012, retiring the RECs in EnergyUnited's 2010 compliance sub-accounts. The Commission issued an Order on May 30, 2012, approving EnergyUnited's 2011 compliance plan.

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 2012 REPS compliance report with the Commission. In its report, EnergyUnited stated that it met its 2011 solar set-aside requirement by purchasing 488 solar RECs. EnergyUnited plans to fulfill its general REPS requirement in 2012 and beyond through the use of landfill gas generation (through 2012, with an option to extend the contract); RECs from its SEPA allocation; the purchase of RECs; and its two approved EE programs. EnergyUnited stated that it has already accumulated enough general RECs to meet its 2012 requirement (72,134), and anticipates accumulating enough RECs to meet its obligation for many years into the future. EnergyUnited stated that it has contracted for out-of-state poultry RECs that would be eligible to satisfy a portion of its poultry waste set-aside requirement. However, EnergyUnited cited a lack of sufficient resources, and stated that it has joined 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.

Tennessee Valley Authority (TVA)

On August 31, 2011, in Docket No. E-100, Sub 131, TVA filed its 2011 REPS compliance plan and 2010 REPS compliance report with the Commission. With regard to its cooperatives' solar set-aside obligation, TVA stated it planned to meet the obligation by generating the energy at its facilities, and facilities owned by others, and/or purchasing solar RECs. For the general 2012 REPS requirement, TVA will utilize a combination of wind RECs, hydroelectric generation, DSM and EE. TVA met its cooperatives' 2010 solar set-aside requirement by purchasing solar RECs. The Commission issued an Order on May 14, 2012, retiring the RECs in TVA's 2010 compliance sub-accounts.

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. In its plan, TVA indicated its intent to fulfill the general REPS requirement in 2012 through 2014 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 obligation in years 2012 through 2014, TVA reiterated its plans to meet it by generating the energy at its facilities and facilities owned by others, and/or purchasing solar RECs. In its report TVA stated it had satisfied its 2011 solar set-aside requirement through the generation of solar energy and the purchase of solar RECs. TVA stated that it believes that the 2012 and 2013 swine waste and poultry waste set-aside requirements will be delayed until 2014. TVA further stated that if the swine waste and poultry waste set-asides are not delayed TVA will attempt to purchase RECs to comply.

Halifax Electric Membership Corporation (Halifax)

On September 1, 2011, in Docket No. E-100, Sub 128, Halifax filed its 2011 REPS compliance plan and 2010 REPS compliance report with the Commission. Halifax noted that it is a participant in the collaborative effort of electric power suppliers to meet the swine waste and poultry waste set-aside requirements. With regard to its 2010 solar set-aside obligation, Halifax met that requirement by generating solar energy on its 98.56-kilowatt (kW) solar PV system and purchasing solar RECs. The Commission issued an Order on May 30, 2012, approving Halifax's 2011 compliance plan.

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. 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 is a participant in the collaborative effort of electric power suppliers to meet the swine waste and poultry waste set-aside requirements, but also noted that the swine waste group's future is uncertain and that Halifax has begun to look for swine RECs on its own to satisfy the 2012 swine waste set-aside requirement is uncertain. With regard to its 2011 solar set-aside obligation, Halifax met that requirement by generating solar energy on its 98.56 kW solar PV system and purchasing solar RECs.

North Carolina Eastern Municipal Power Agency (NCEMPA)

On August 3, 2010, in Docket No. E-48, Sub 6, the Commission held a hearing to consider NCEMPA's 2008 REPS compliance report. On May 3, 2011, the Commission issued an Order concluding that NCEMPA's report did not comply with the requirements of G.S. 62-133.8 and Commission Rule R8-67. The Commission ordered NCEMPA to file revised 2008 and 2009 REPS compliance reports consistent with the Commission's Order by September 1, 2011.

On August 31, 2011, in Docket No. E-100, Sub 131, NCEMPA filed with the Commission, on behalf of its members, a 2011 REPS compliance plan and 2010 REPS compliance report, along with revised 2008 and 2009 REPS compliance reports. NCEMPA stated that it has entered into contracts to purchase various types of RECs and will continue to investigate the market for unbundled RECs as a cost-effective means of REPS compliance. NCEMPA met its 2010 solar set-aside requirement by purchasing solar RECs. NCEMPA has executed contracts to purchase sufficient solar RECs to meet its requirements through 2013. Finally, NCEMPA estimates that its incremental costs for REPS compliance will be less than its per-account cost cap in 2011 through 2013. The Commission issued an Order on May 14, 2012, retiring the RECs in NCEMPA's 2010 compliance sub-accounts. Approval of NCEMPA's 2008 and 2009 compliance reports is still pending before the Commission.

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. NCEMPA stated that its members will meet their REPS requirements by purchasing RECs, as well as utilizing SEPA allocations and EE programs. In its compliance report NCEMPA stated that it met its members' 2011 solar set-aside requirement 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 2014. NCEMPA stated that, despite its continued work in collaborative efforts with other electric power suppliers to meet the swine waste set-aside REPS requirements, it does not anticipate complying until 2014. Additionally, NCEMPA stated that, despite entering into contracts for both in-State and out-of-state poultry RECs, it is unlikely that they will be able to comply with the poultry waste set-aside in 2012. NCEMPA has joined 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. Finally, NCEMPA estimates that its incremental costs for REPS compliance will be substantially less than its per-account cost cap in 2012 through 2014.

North Carolina Municipal Power Agency No. 1 (NCMPA1)

On July 27, 2010, in Docket No. E-43, Sub 6, the Commission held a hearing to consider NCMPA1's 2008 REPS compliance report. On May 3, 2011, the Commission issued an Order concluding that NCMPA1's report did not

comply with the requirements of G.S. 62-133.8 and Commission Rule R8-67. The Commission ordered NCMPA1 to file revised 2008 and 2009 REPS compliance reports consistent with the Commission's Order by September 1, 2011.

On August 31, 2011, in Docket No. E-100, Sub 131, NCMPA1 filed with the Commission, on behalf of its members, a 2011 REPS compliance plan and 2010 REPS compliance report, along with revised 2008 and 2009 REPS compliance reports. NCMPA1 met its 2010 REPS solar set-aside requirement by a combination of purchases of energy from solar facilities and purchases of solar RECs. In addition, it has contracts for the acquisition of sufficient solar RECs to meet its requirements through 2012, and issued an RFP for additional solar resources in July 2011. Finally, NCMPA1 estimates that its incremental costs for REPS compliance will be less than its per-account cost cap in 2011 through 2013. The Commission issued an Order on May 14, 2012, retiring the RECs in NCMPA1's 2010 compliance sub-accounts.

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 stated that its members will meet their REPS requirements by purchasing RECs, as well as utilizing SEPA allocations and EE programs. In its compliance report NCMPA1 stated that it met its members' 2011 solar set-aside requirement by purchasing electricity from solar generating facilities and through the purchase of solar RECs. In its compliance plan NCMPA1 stated that it has entered into contracts for enough RECs to satisfy the solar set-aside requirement through 2014. NCMPA1 stated that despite its continued work in collaborative efforts with other electric power suppliers to meet the swine waste set-aside REPS requirements that it does not anticipate complying until 2014. Additionally, NCMPA1 stated that it has entered into contracts for both in-State and out-of-state poultry RECs to satisfy its obligations for 2012 through 2014. Despite this, NCMPA1 has joined 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. Finally, NCMPA1 estimates that its incremental costs for REPS compliance will be less than its per-account cost cap in 2012 through 2014.

Fayetteville Public Works Commission (FPWC)

On April 30 2012, FPWC filed a revised 2009 REPS compliance report in Docket No. E-100, Sub 129. FPWC also filed a revised 2010 REPS compliance report on April 30, 2012, in Docket No. E-100, Sub 131. In both filings, FPWC proposed to amend its REPS reports to exclude electric use and accounts associated with electricity used by other municipal departments of the City of Fayetteville (City), including City water and sewer operations. On May 8, 2012, and May 10, 2012, the Public Staff filed comments in the above-captioned dockets opposing FPWC's proposal to amend it 2009 and 2010 REPS compliance reports. On May 14, 2012, the Commission issued an Order finding

that the 423 solar RECs that FPWC had placed in its 2010 REPS compliance sub-account corresponded to the highest 2009 retail sales figure that had been posited for FPWC, and that FPWC's proposed revised 2010 REPS compliance report did not propose a revised number of RECs for FPWC's 2010 REPS compliance. The Commission concluded that FPWC had complied with its 2010 REPS obligation. Subsequently the Commission permanently retired the 423 solar RECs that were in FPWC's 2010 NC-RETS compliance sub-account.

On May 30, 2012, FPWC filed a motion for reconsideration of the Commission's May 14, 2012 Order. FPWC asked the Commission to defer retirement of 22 of the 423 solar RECs it had placed in its 2010 NC-RETS compliance sub-account until the Commission resolves the pending dispute as to the proper level of retail electric sales that are attributable to FPWC in 2009 for purposes of calculating FPWC's 2010 REPS obligation. The matter is still pending before the Commission.

On August 21, 2012, in Docket No. E-100, Sub 135, FPWC filed a motion for an extension of time to file its 2011 compliance report and 2012 compliance plan. On August 27, 2012, in the same docket the Commission issued an Order granting FPWC an extension to file its report and plan until September 24, 2012.

Oak City

On September 2, 2011, in Docket No. E-100, Sub 131, Oak City filed its 2011 REPS compliance plan and 2010 REPS compliance report. Oak City's 2010 REPS compliance report stated that it acquired one solar REC to meet the 2010 solar set-aside requirement. On May 14, 2012, the Commission issued an Order that Oak City, dependent on the filing of its verification, had met its 2010 REPS obligation and retiring the RECs in its 2010 compliance sub-account.

On August 31, 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 EMC (EMEMC), its wholesale provider, to meet its REPS requirement. EMEMC utilizes GreenCo as its compliance agent, Oak City expects the transition to be complete at the end of 2012. Oak City stated that beginning January 1, 2013, it will compensate EMEMC for the cost of compliance moving forward. To satisfy 2012 obligations Oak City intends to purchase solar and generic RECs, as well as swine and poultry RECs if available. Oak City's 2011 REPS compliance report stated that it acquired one solar REC to meet its 2011 solar set-aside requirement.

<u>Winterville</u>

On August 31, 2011, in Docket No. E-100, Sub 131, Winterville filed its 2011 REPS compliance plan and 2010 REPS compliance report. Winterville's 2010 REPS compliance report stated that it met its 2010 solar set-aside obligation by purchasing solar RECs. On May 14, 2012, the Commission issued an Order retiring the RECs in Winterville's 2010 compliance sub-account and requesting that Winterville submit M&V documentation of its EE program.

On August 30, 2012, in Docket No. E-100, Sub 135, Winterville filed its 2012 REPS compliance plan and 2011 REPS compliance report. Winterville indicated that it has not purchased any RECs yet for 2012 compliance, but that it expects to purchase RECs in August through November of 2012. Winterville has not participated in the joint buyers groups for swine waste or poultry waste RECs, but indicates that it is willing to purchase swine and poultry RECs from other utilities or on the market if available. Winterville has 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 obligation by purchasing solar RECs.

Town of Fountain (Fountain)

On October 25, 2011, Fountain filed its 2011 compliance plan and 2010 compliance report. Fountain's report stated that its 2010 REPS compliance obligation was one solar REC. Fountain did not meet its 2010 REPS requirement during 2010. The report stated that Fountain bought two solar RECs in October of 2011, and proposed that they be used to meet its 2010 and 2011 REPS requirements. On May 14, 2012, the Commission issued an Order in Docket No. E-100, Sub 131, stating that Fountain's 2010-2011 compliance sub-account in NC-RETS shall be maintained in "pending" status until the Commission reviews Fountain's 2011 REPS compliance. Because Fountain took actions to come into compliance the Commission found that Fountain met its 2010 REPS obligation.

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 from renewable energy suppliers. Fountain's report stated that its 2011 REPS compliance obligation 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 noted that it did not participate in the collaborative effort to acquire swine and poultry RECs, nor was it 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 its future requirements, if available.

Wholesale Providers Meeting REPS Requirements

PEC, as the wholesale provider, has agreed to meet the REPS requirements for the towns of Black Creek, Lucama, Sharpsburg, Stantonsburg, and the city of Waynesville. Similarly, Duke 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.

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 2,000 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 the 2010, and appear to have met the 2011, solar set-aside requirement of Senate Bill 3. All of the electric power suppliers appear on track to meet the general REPS requirements coming into effect in 2012. However, most do not appear on track to meet the poultry waste and swine waste set-asides for 2012 and some have filed an Amended Joint Motion to delay implementation of that section of the REPS, a matter still pending before the Commission. In addition, as stated in the 2011 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' obligations under the set-aside provisions, the eligibility of renewable energy facilities and resources to meet the set-aside provisions, etc. If the plain language of the statute was ambiguous, the Commission attempted to discern the intent of the General Assembly in reaching its decision on the proper interpretation of the statute. 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.¹

On October 1, 2008, the Commission made its first annual report pursuant to G.S. 62-133.8(j),² and last year, on September 30, 2011, the Commission made its fourth annual report.³ 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.

¹ 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.

² 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).

³ 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, September 30, 2011 (2011 REPS Report).

The 2011-2012 General Assembly enacted four amendments to Senate Bill 3. First, Session Law 2011-55 (Senate Bill 75) was ratified by the General Assembly on April 21, 2011, and signed by the Governor on April 28, 2011. It became effective on April 28, 2011. In Section 1, Senate Bill 75 amended G.S. 62-133.8(a) by adding a new subdivision (3a), which states:

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

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

Second, Session Law 2011-279 (Senate Bill 484) was ratified by the General Assembly on June 18, 2011, and signed by the Governor on June 23, 2011. It became effective June 23, 2011. Senate Bill 484 amended provisions in Session Law 2010-195. Session Law 2010-195 provided that energy produced at a "cleanfields renewable energy demonstration park," as defined in the Session Law, would receive triple credit towards renewable energy certificates (RECs) for the first 20 megawatts (MW) built and that the additional credits would be both eligible, and first used, to fulfill the REPS poultry waste set-aside created by G.S. 62-133.8(f). Session Law 2010-195 established ten criteria that must be met for a facility to qualify as a "cleanfields renewable energy demonstration park." Senate Bill 484 limited the application of the additional RECs to the poultry waste set-aside to the additional credits earned by the first 10 MW built. Since only 20 MW are eligible for the multiplied credits the practical effect Senate Bill 484 for a facility that qualifies as a "cleanfields renewable energy demonstration park" constructed for 20 MW of power would be that such a facility would earn RECs as if 60 MW were built, of the 40 MW of additional RECs, 20 MW, rather than the entire 40 MW, would be applied to the poultry waste set-aside created by G.S. 62-133.8(f).

Third, Session Law 2011-309 (Senate Bill 710) was ratified by the General Assembly on June 18, 2011, and signed by the Governor on June 27, 2011. It became effective on June 27, 2011. Section 1 of Senate Bill 710 made several findings regarding the need to allow the use of RECs derived from the thermal energy of a combined heat and power (CHP) facility that uses poultry waste as a fuel to meet the REPS poultry waste set-aside requirement. Among the reasons cited in Section 1 were the difficulty that electric power suppliers have experienced in procuring electricity derived from poultry waste at a reasonable

cost, the benefit of diversifying the State's viable options for generating electricity from renewable energy resources, and the benefits derived by improving the State's air quality. Section 2 of Senate Bill 710 amended G.S. 62-133.8(f) by adding the phrase "or an equivalent amount of energy," as follows (in pertinent part):

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

This amendment to G.S. 62-133.8(f) responded to the Commission's previous decision in Docket No. E-100, Sub 113, that thermal RECs could not be used to meet the poultry waste set-aside requirement.

Finally, Session Law 2011-394 (House Bill 119) was ratified by the General Assembly on June 18, 2011, and presented to the Governor on June 20, 2011. The bill became law without the Governor's signature on July 1, 2011; the relevant portion of the bill became effective July 1, 2011. Session Law 2011-394 contained 23 distinct policy changes, only Section 1 of the session law amended Senate Bill 3. Section 1 amended G.S. 62-133.8(g) by exempting a biomass combustion facility that qualifies as a new renewable energy facility as defined in G.S. 62-133.8 (a)(5)b from the requirement that the State conduct a case-by-case determination and require subsequent permit conditions based on Best Available Control Technology (BACT). Previously, G.S. 62-133.8(g) stated that "a biomass combustion process at any new renewable energy facility that delivers electric power to an electric power supplier" was required to meet the BACT emissions standard regardless of if BACT was required by Federal law. Session Law 2011-394 amended the provision so that it no longer applied to facilities that qualify as a new renewable energy facility as defined in G.S. 62-133.8 (a)(5)b. G.S. 62-133.8 (a)(5)b accounts for facilities that: "delivered power to an electric power supplier pursuant to a contract with NC GreenPower Corporation that was entered into prior to January 1, 2007." Biomass combustion facilities that were placed into service on or after January 1, 2007, thus meeting the definition of a "New renewable energy facility" as defined in G.S. 62-133.8 (a)(5) a must still comply with the BACT requirement.

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 2011 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 obligation, both the set-aside requirements and the overall REPS requirements, should be based on its prior year's actual North Carolina retail sales.
- An electric public utility cannot use existing utility-owned hydroelectric generation for REPS compliance, but may use power generated from new small (10 MW or less) increments of utility-owned hydroelectric generating capacity.
- The solar, swine waste, and poultry waste set-aside requirements should have priority over the general REPS requirement where both cannot be met without exceeding the per-account cost cap established in G.S. 62-133.8(h).
- The set-aside requirements may be met through the generation of power, purchase of power, or purchase of unbundled RECs.

- The 25% limitation on the use of out-of-state RECs applies to the general REPS obligation and each of the individual set-aside provisions.
- The electric power suppliers are charged with collectively meeting the aggregate swine 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 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), but RECs associated with out-of-state renewable generation not delivered to and purchased by an electric public utility in North Carolina and RECs associated with out-of-state thermal energy would not be considered to be in-State RECs pursuant to G.S. 62-133.8(b)(2)(d).
- 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 Progress Energy Carolinas, Inc. (PEC), 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 PEC 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 obligations of G.S. 62-133.8(e)

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

- As it had earlier done with regard to the aggregate swine waste setaside requirement, the Commission approved the joint procurement of RECs from energy produced by poultry waste, the sharing of poultry waste generation bids among electric suppliers, and other collaborative efforts proposed by PEC, Dominion, NCEMC, NCEMPA, NCMPA1, EnergyUnited 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. The Commission suggested that Peregrine and parties supporting Peregrine's position could seek an amendment to G.S. 62-133.8(f) by the General Assembly. Session Law 2011-309 (Senate Bill 710) became law on June 27, 2011, adding the phrase "or an equivalent amount of energy" to G.S. 62-133.8(f).

- In response to a motion filed on September 14, 2010, in Docket No. E-100, Sub 113, by PEC, 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.

Since October 1, 2011, 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.

Order Requiring EMCs and Municipal Power Supplier to File M&V Plans for EE and DSM Plans, Docket No. E-100, Sub 113 (May 14, 2012).

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

Numerous parties filed comments and reply comments in October and November of 2010. An additional issue raised by the parties in their filings was whether to establish an M&V advisory group and require electric power suppliers to jointly select a third party auditor. On May 14, 2012, the Commission issued an Order in Docket No. E-100, Sub 113, in response to the filed comments and reply comments, 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 DSM measures and include an 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 EE certificates they have reported to date and submit any changes necessitated by the Order.

Order Amending Rules Governing Filing Requirements for New Electric Generation Facilities, Docket E-100, Sub 134 (July 30, 2012).

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. These rules are applicable to all electric generators that meet certain criteria, not just new renewable energy facilities; however, they do apply to renewable energy facilities, particularly Rule R8-64, which is applicable to small power producers. Thus these changes are relevant to this report and REPS compliance. 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.

Amended Joint Motion Requesting Delay of the Poultry Waste and Swine Waste Set-Aside Requirements, Docket No. E-100, Sub 113.

On May 16, 2012, the Commission issued an Order in Docket No. E-100, Sub 113, requiring that all electric power suppliers that serve retail customers in North Carolina submit an update regarding their plans for meeting the swine waste and poultry waste set-asides. On June 1, 2012, PEC, Duke, Dominion, GreenCo, FPWC, EnergyUnited, Halifax, TVA, NCEMPA, and NCMPA1 (hereinafter referenced collectively as Petitioners), filed a motion to modify and delay the swine waste and poultry waste set-aside requirements in G.S. 62-133.8(e) and (f). The motion stated that despite the Petitioners best efforts the aggregate requirements of the poultry waste and swine waste set-asides cannot be achieved in 2012. The Petitioners requested that the Commission issue an Order that: 1) delays the Petitioners need to comply with the swine waste and poultry waste set-asides, 2) allows the Petitioners to bank swine and poultry RECs previously acquired for use in future years, and 3) allows the Petitioners to replace compliance with the swine waste and poultry waste set-asides with compliance measures that satisfy the general REPS requirements established in G.S. 62-133.8(b), (c), and (d). In response to the motion, on June 21, 2012, 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.

On July 17, 2012, the Petitioners filed an amended motion. The amended motion requested that the Commission issue an Order that delays the Petitioners swine waste and poultry waste set-aside REPS requirements until 2014, a two year delay. On July 25, 2012, Progress, Duke, Dominion, NCEMPA, NCMPA1, GreenCo, TVA, EnergyUnited, and FPWC filed testimony in response to the Commission's June 21, 2012, Order. On July 31, 2012, Duke and Progress filed a settlement agreement between them and NCSEA, North Carolina Farm Bureau, North Carolina Pork Council, and North Carolina Poultry Federation. In the settlement agreement Duke and Progress agreed to, among other things, retire additional solar RECs during 2012 and 2013 than required by the solar set-aside in the REPS (0.09% rather than 0.07%). In exchange, the other parties of the settlement agreed not to oppose the relief requested by Duke, Progress and the other Petitioners in the Amended Joint Motion. Additionally, Duke and Progress represented in the settlement agreement agreement agreement that they will seek to meet

their swine waste and poultry waste set-aside obligations outside of a collaborative agreement with other electric suppliers, a change from previous statements. On August 6, 2012, the Commission issued an Order requesting information from Duke and Progress in response to the settlement agreement provision that Duke and Progress would seek to meet their requirements outside of a collaborative agreement. The Commission received testimony and rebuttal testimony from several other parties and intervenors. A hearing was held by the Commission on August 28, 2012. The matter is still pending before the Commission.

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 August 6, 2012, the Commission has accepted registration statements filed by 597 facilities.

As detailed in the 2011 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. In a prior order, the Commission had clarified that only the portion of the energy generated from the biogas that is derived from poultry waste is eligible to earn RECs that may be used to meet the REPS poultry waste set-aside requirement.
- Issued a declaratory ruling that: (1) biosolids, the organic material remaining after treatment of domestic sewage and combusted at the applicant's wastewater treatment plant, are a "renewable energy"

resource" as defined by G.S. 62-133.8(a)(8); and (2) the applicant, a county water and sewer authority organized in 1992 pursuant to the North Carolina Water and Sewer Authorities Act, is specifically exempt from regulation as a public utility pursuant to G.S. 62-3(23)(d).

- Accepted for registration as a new renewable energy facility a solar thermal hot water heating facility located in Mecklenburg County, North Carolina, used to heat two commercial swimming pools. The Commission concluded, however, that as an unmetered solar thermal facility, RECs earned based on the capacity of the solar panels are not eligible to meet the solar set-aside requirement of G.S. 62-133.8(d). However, the Commission allowed the applicant to earn general thermal RECs based upon an engineering analysis of the energy from the unmetered solar thermal system 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 is thus 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.

Since October 1, 2011, the Commission has issued a number of additional orders interpreting provisions of Senate Bill 3 regarding applications for registration of renewable energy facilities, as described below.

Order Accepting Registration of New Renewable Energy Facilities and on Requests for Waivers, Docket Nos. RET-11, Sub 0, et al. (October 21, 2011).

From February 8, 2010, through June 21, 2010, FLS Energy, Inc, and FLS K Farm, LLC (collectively FLS), filed registration statements for nine facilities in Docket Nos. RET-11, Sub 0, et al. FLS stated that it was economically impractical to install monitoring systems at these small facilities and proposed to use RETScreen Analysis Software (RETScreen) to calculate the estimated solar thermal production of each facility. On March 26, 2010, FLS, in response to Public Staff's request for more information, stated that it would be economically impracticable to monitor systems generating less than 45,000 kilowatt hours (kWh) or BTU equivalent because the resulting payback period for the equipment would exceed the period of depreciation, and that RETScreen software meets or exceeds industry-accepted methods for estimating solar thermal production. On August 4, 2010, Public Staff recommended that the unmetered solar thermal facilities earn RECs for the general REPS requirement in G.S. 62-133(b) and (c), but that these RECs would not be eligible to count towards the solar set-aside requirement in G.S. 62-133.8(d).

On December 8, 2010, FLS filed a request that the RECs up until that point be eligible to count towards the solar set-aside requirement. On January 6, 2011, relying on the Commission's Order in Docket No. RET-10, Sub 0, and the language in G.S. 62-133.8(d), Public Staff responded to the request recommending that the RECs earned at an unmetered solar thermal facility qualify for the general requirement but not for the solar set-aside requirement.

On October 21, 2011, the Commission issued an Order accepting the registrations of the nine facilities, but stating that good cause does not exist to grant FLS's 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. 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 Order allowed FLS to estimate usage and earn RECs for the facilities in months prior to the installation of meters; however, only those RECs earned after the installation of a meter would be eligible to meet the solar set-aside requirement. The Commission did however, waive the two-year limitation on earning RECs for historic renewable energy production because FLS initially filed its registration statements for these facilities within two years of the date of electric production for which they sought to earn historic RECs. The historic RECs would be eligible to only meet the general REPS requirement.

Order Denying Registration of a Concentrated Solar Power (CSP) Thermal System as a New Renewable Energy Facility, Docket No. RET-28, Sub 0 (December 22, 2011).

On September 26, 2011, as amended November 21, 2011, Snowflake Holdings, Inc. (Snowflake), filed a registration statement in Docket No. RET-28, Sub 0, pursuant to Commission Rule R8-66 for a new renewable energy facility located in Snowflake, Arizona. The statement described the facility as a concentrated solar power (CSP) thermal system consisting of 3,120 parabolic troughs serving as a pre-heat augmentation system for boiler feed water. Snowflake indicated that the CSP thermal system would be integrated into an existing biomass facility that utilized wood chips and wood sludge as its fuel source for electrical generation. The Commission denied the registration of Snowflake's CSP thermal system as a new renewable energy facility based upon the fact that the system would be integrated into the 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.

Orders Granting CPCNs and Accepting Registration as a New Renewable Energy Facility for Land Based Coastal Wind Facilities, Docket Nos. EMP-49, Sub 0, and EMP-61 Sub 0 (May 3, 2011, and March 8, 2012).

On May 3, 2011, the Commission issued an Order in Docket No. EMP-49, Sub 0, granting Atlantic Wind, LLC (Atlantic Wind), a subsidiary of Iberdrola Renewables Inc., a CPCN and accepting its registration of a new renewable energy facility for a 300-MW wind facility in Pasquotank and Perquimans Counties. This facility became the first commercial scale wind facility in North Carolina to receive a CPCN and registration acceptance from the Commission. The project will consist of up to 150 wind turbines across approximately 20,000 acres and will interconnect with Dominion. The facility's net capacity factor is expected to be around 29%-39%, and the estimated net production is expected to be 750,000 to 950,000 MWh per year.

Prior to the issuance of the CPCN and the acceptance of the registration the Commission received recommendations from the Public Staff, and on March 4, 2011, granted a petition by NCSEA to intervene in the proceedings. On March 10, 2011, and April 5, 2011, the Commission held hearings in Elizabeth City and Raleigh respectively, hearing testimony from a total of eleven members of the public. On March 14, 2011, the North Carolina Department of Administration filed comments indicating that no further State Clearinghouse review action was necessary to comply with the North Carolina Environmental Policy Act.

In its May 3, 2011 Order the Commission found that "[t]he generation of electricity with wind energy will diversify resources used to meet North Carolina's needs. The project will provide greater energy security for North Carolina by the use of a truly indigenous and renewable resource available within the State." The CPCN was granted with three primary conditions: (1) assurances that the CPCN does not confer the power of eminent domain to the project; (2) that the facility shall be constructed and operated in concordance with all applicable laws and regulations, including any environmental permitting requirements, and (3) the certificate shall be subject to revocation if any required licenses, permits, or exemptions are not obtained.

On March 8, 2012, the Commission issued an Order in Docket No. EMP-61, Sub 0, granting Pantego Wind Energy LLC (Pantego Wind), a subsidiary of Invenergy Wind North America LLC, a CPCN and accepting its registration of a new renewable energy facility for an 80-MW wind facility in Beaufort County. This facility became the second commercial scale wind facility in North Carolina to receive a CPCN and registration acceptance from the Commission. The project will consist of wind turbines across approximately 11,000 acres and will interconnect with Dominion. The facility's net capacity factor is expected to be around 25%-36%, and the estimated net production is expected to be 174,000 to 250,000 MWh per year.

Prior to the issuance of the CPCN and the acceptance of the registration the Commission received recommendations from the Public Staff, and on November 10, 2011, granted a petition by NCSEA to intervene in the proceedings. On November 17, 2011, and December 6, 2011, the Commission held hearings in Washington, NC and Raleigh, respectively, hearing testimony from a total of 27 members of the public. On October 21, 2011, the North Carolina Department of Administration filed comments through the State Clearinghouse indicating that a response to concerns raised by the Department of Environment and Natural Resources (DENR), regarding the lack of environmental analysis, and the facility's potential impact on migratory birds, should be submitted to the Clearinghouse. In addition, on December 5, 2011, DENR filed additional comments with the State Clearinghouse in which the Natural Heritage Program stated it learned that the northwestern 70% of the proposed wind farm area lies within an Important Bird Area as identified by Audubon North Carolina and recommended that field studies be conducted regarding the impact of the facility on birds. On December 7, 2011, the United States Fish and Wildlife Service (USFWS) filed a letter questioning if current studies were sufficient to assess the potential impacts to migratory birds and identifying the tundra swan as a species of special concern. USFWS suggested that the Commission delay issuance of the CPCN until the completion of current field studies.

In its March 8, 2012 Order granting the CPCN and accepting registration the Commission found that the facility is subject to federal, State, and local laws including the federal Clean Water Act (CWA), Migratory Bird Treaty Act (MBTA), Endangered Species Act (ESA), Bald and Golden Eagle Protection Act (BGEPA), and the State Coastal Area Management Act (CAMA). Additionally the Commission found that the USFWS has developed draft Land-Based Wind Energy Guidelines for Wind Turbine Siting (Guidelines). The CPCN was granted with several conditions, including: 1) the certificate does not confer the power of eminent domain to the project; 2) the facility shall be constructed and operated in concordance with all applicable laws including the MBTA and the BGEPA; 3) no less than 45 days prior to erecting turbines, Pantego Wind shall prepare, in consolation with USFWS, an avian and bat protection plan, a post construction monitoring and adaptive management plan, and file with the Commission a summary of ongoing consultation with wildlife agencies. Additionally, among several other conditions, the certificate was granted with a requirement that Pantego Wind follow the draft USFWS Guidelines once published in the Federal Register.

Order Accepting Directed Biogas as a Renewable Energy Resource, Docket No. SP-100, Sub 29 (March 21, 2012).

On February 13, 2012, Bloom Energy Corporation (Bloom), filed a request that the Commission issue a declaratory ruling that "directed biogas" is a "renewable energy resource" as defined in G.S. 62-133.8(a)(8). Bloom 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 outside the State where the electricity generated is delivered to a public utility that provides electric power to retail customers in the State.

In support of its request Bloom identified several aspects of directed biogas production, delivery, and consumption. Of note, Bloom stated that the volume

and heat content of the injected biogas will be measured at a utility grade meter at the point of injection. Additionally, Bloom stated that the owner of a facility that plans to nominate directed biogas for its facility will register as a new renewable energy facility pursuant to Commission Rule R8-66, providing the source of the biogas, the method of reporting the volume of directed biogas nominated for the facility, and the expected amount of electricity generated by the facility. Finally, Bloom stated that only the energy generated from the directed biogas nominated to the facility, as validated by a third party, will count towards the creation of RECs.

On March 12, 2012, the Public Staff presented this matter to the Commission. The Public Staff recommended that the Commission hold that biogas derived from a renewable energy resource should be considered a renewable energy resource itself, and thus be eligible to earn RECs pursuant to G.S. 62-133.8. The Public Staff stated that to be eligible an owner should be required to attest to the renewable energy resource content of the biogas and provide sufficient documentation of the source and content of the biogas. A representative of NCSEA was also heard on the matter, noting that they did not oppose the classification of directed biogas as a renewable energy resource so long as appropriate attestations are required to ensure the resource is not double counted.

On March 21, 2012, the Commission issued an Order declaring directed biogas, as defined above, 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).

Order Noticing the Intent to Revoke Registration as a New Renewable Energy Facility for CHP Facility Not Producing Electricity Net of Station Use, Docket No. SP-729, Sub 1 (August 10, 2012, and September 17, 2012).

On July 26, 2010, the Commission issued an Order Accepting Registration of new renewable energy facility pursuant to an application made on June 17, 2010, by W.E. Partners I, LLC (WEP). WEP had filed a request to register a new renewable energy facility that would be a cogeneration facility with two 29 MMBtu/hour wood waste-fired boilers and a 375-kW steam turbine electric generator. WEP stated that electricity produced by the facility would be sold to Dominion and that steam extracted from the turbine after electric power generation would be provided to Perdue Agribusiness, Inc. (Perdue), for its grain elevator operations. On March 8, 2012, WEP filed a supplement to registration and request for declaratory ruling. In its filing, WEP stated that subsequent to its 2010 registration request it had changed its facility configuration and operations. WEP stated that it had increased the size of its electric generator from 375 kW to 495 kW. WEP also stated that it no longer planned to sell electricity to Dominion because Perdue was using less steam than had been anticipated, thus reducing the amount of electricity generated by the facility to only a range from 190 kW to 220 kW of power. WEP stated that "all electrical energy generated at WEP's facility is used at that facility." WEP requested that the Commission issue a declaratory ruling finding that its biomass-fueled facility is a CHP system that remains eligible to earn RECs for its thermal energy production.

On April 2, 2012, the North Carolina Association of Professional Loggers (NCAPL) and NCSEA jointly filed comments supporting WEP's request. On May 3, 2012, the Public Staff filed its response in opposition to WEP's request. On May 18, 2012, WEP filed reply comments to the Public Staff's response. In its reply comments WEP opposed the Public Staff's position that the definition of "station service" be a determining factor relative to whether its thermal energy is eligible for RECs, arguing that its facility's approval as a new renewable energy facility pre-dated the Commission's January 31, 2011, adoption of the NC-RETS Operating Procedures in which station service is defined. In addition, WEP opposed the Public Staff's contention that electricity must be delivered to an electric power supplier in order to be eligible for RECs.

On August 10, 2012, the Commission issued an Order that denied WEP's request and noticed the Commission's intent to revoke the registration of WEP's biomass-fueled facility as a new renewable energy facility effective August 24, 2012. The Commission determined that the definition of "station service" applied to WEP's facility. The Commission further stated 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 also disagreed with WEP's contention that 10 kW used on site to power the heating, air-conditioning, and lighting did not constitute "station service." 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. Finally, the Commission disagreed with the Public Staff's contention that electricity must be delivered to an electric power supplier in order to be eligible for RECs. The Commission noted that it has approved renewable energy facility registrations for numerous small solar facilities whose owners use the power directly rather than selling it to an electric power supplier.

Thus the Commission concluded that since G.S. 62-133.8(a)(7)(b) requires that a CHP facility must generate "useful, measureable combined heat and power derived from a renewable energy resource" in order to be eligible for RECs, while WEP's facility used a renewable resource, it did not meet the two-part definition because it consumes all of the electricity that it generates, and thus did not produce useful and measurable power. The Commission therefore found that none of the facility's energy output was eligible for REC issuance.

On August 23, 2012, WEP filed a letter with the Commission updating the Commission to changes at its facility and requesting that the Commission "provide an opinion as quickly as possible" on a new facility setup under consideration. WEP stated that it intends to establish interconnection with Dominion if necessary. However, WEP requested that the Commission consider an alternative that would allow WEP to avoid the high interconnection costs associated with exporting a minimal amount of electricity. WEP proposed to donate its excess electric energy, free of charge, to its steam host for use in powering a water pump. WEP contended that in such a scenario it would not be a public utility, as defined in G.S. 62-3(23)a.1, because the electricity would not be sold "for compensation." WEP contended that under this scenario it would be producing useful and measurable electric and thermal energy and, thus, would qualify as a CHP facility for the issuance of RECs.

On August 27, 2012, the Commission issued an Order Requesting Comments and Delaying Revocation. The Commission requested that the Public Staff and any other interested parties provide comments on WEP's .The Public Staff disagreed with WEP's position that by giving away the electricity it produces to its steam host, Perdue, it would not meet the definition of a public utility in G.S. 62-3(23)a.1, because it would not be doing so "for compensation." NCSEA stated that because WEP "does not receive compensation for the delivered electricity, WEP should not be considered a public utility."

On September 17, 2012, the Commission issued an order that denied WEP's request and noticed the Commission's intent to revoke the registration of WEP's biomass-fueled facility as a new renewable energy facility effective September 28, 2012. The Commission held that because compensation could be built into the financial arrangements with Perdue and because WEP could recover the costs of its electric generation, that the proposed scenario 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 would open a Pandora's box of 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. The Commission also noted that whether WEP gave away the electricity or interconnected with Dominion would be irrelevant if WEP's facility had not increased its output or decreased its station load to comply with the Commission's August 10, 2012 Order.

Order Revoking the Registrations of Renewable Energy Facilities for Failure to File Annual Certifications, Docket No. E-100, Sub 130 (September 26, 2012).

On May 30, 2012, the Commission issued an Order giving notice of its intent to revoke the registration of one hundred-twelve 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). Facility owners were given until July 1, 2012, to file their annual certifications belatedly. According to Commission records, and records maintained in NC-RETS, the owners of ten new renewable energy facilities did not complete their annual certifications on or before July 1, 2012, as required by the Commission's May 30, 2012 Order, nor had an annual certification been completed for these facilities as of September 25, 2012. On September 26, 2012, in Docket No. E-100, Sub 130, and the corresponding dockets for the revoked facilities, the Commission issued an Order revoking the registrations of a total of ten renewable energy facilities for failure to file annual certifications required by Commission Rule R8-66(b).

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 recovered from the suppliers' customers through the REPS incremental cost rider. Owners of renewable energy facilities and other NC-RETS users do not incur charges to open accounts, register projects, and create and transfer RECs, but will incur nominal fees to export RECs to other tracking systems or to retire RECs other than for REPS compliance.

At the end of 2010, each electric power supplier was required to place the solar RECs that it acquired to meet its 2010 REPS solar set-aside obligation into a 2010 compliance account where the RECs are available for audit. The Commission concluded its review of each electric power suppliers' 2010 REPS compliance report; the associated RECs will be permanently retired, with the exception of the town of Fountain which will meet its 2010 requirement in its 2011 compliance account. At the end of 2011, each electric power supplier was required to place the solar RECs that it acquired to meet its 2011 REPS solar set-aside obligation into a 2011 compliance account where the RECs are available for audit. The Commission will review each electric power suppliers' 2011 REPS compliance report; the associated RECs will be permanently retired. Members of the public can access the NC-RETS web site at www.ncrets.org. 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, 2011, NC-RETS had issued 6,456,151 RECs and 855,494 EE certificates. These numbers could increase because renewable energy generators are allowed to enter historic production data for up to two years.
- As of August 13, 2012, 260 organizations, including electric power suppliers and owners of renewable energy facilities, had established accounts in NC-RETS.
- As of August 13, 2012, approximately 477 renewable energy facilities had been established as NC-RETS projects, enabling the issuance of RECs based on their energy production data.

Pursuant to the MOA, APX has been working with other registries in the United States, such as ERCOT, to establish procedures whereby RECs that were issued in those registries may be transferred to NC-RETS. To date, such arrangements have been established with four such registries. Lastly, the

Commission has established an on-going NC-RETS stakeholder group, providing a forum for resolution of issues and discussion of system improvements.

Environmental Impacts

Pursuant to G.S. 62-133.8(j), the Commission was directed to consult with DENR in preparing its report and to include any public comments received regarding direct, secondary, and cumulative environmental impacts of the implementation of the REPS requirements of Senate Bill 3. The Commission has not identified, nor has it received from the public or DENR, any comments regarding direct, secondary, and cumulative environmental impacts of the implementation of the REPS provision of Senate Bill 3. DENR stated that there continues to be interest in the development of renewable energy resources ranging from wind farms to biomass combustion sources. DENR noted that a number of projects have moved through the permitting process in the past year including some biomass combustion projects. The biomass projects raised some fairly complex questions about interpretation of federal Clean Air Act requirements, but DENR stated that those issues have been resolved. In addition, DENR pointed specifically to two proposed wind farms, noting concerns over avian impacts, and that discussions are underway with relevant State and federal agencies concerning conflicts with low-level military training flights.

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 starting in 2012, part of the REPS requirements must be met through poultry waste and swine waste. In addition, beginning in 2010 each electric power supplier was required to meet 0.02% of its 2009 retail electric sales "by a combination of new solar electric facilities and new metered solar thermal energy facilities that use one or more of the following applications: solar hot water, solar absorption cooling, solar dehumidification, solar thermally driven refrigeration, and solar industrial process heat." G.S. 62-133.8(d). An electric power supplier is defined as "a public utility, an electric membership corporation, or a municipality that sells electric power to retail electric power customers in the State." G.S. 62-133.8(a)(3). Described below are the REPS requirements for the various electric power suppliers and, to the extent reported to the Commission, the efforts of each toward REPS compliance.

Monitoring of Compliance with REPS Requirement

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

Compliance plan

Pursuant to Commission Rule R8-67(b), on or before September 1 of each year, each electric power supplier is required to file with the Commission 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 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: PEC, Duke, and Dominion. Although Duke and PEC have undergone a merger in 2012, for REPS compliance purposes they will 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, PEC 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.⁴

Progress Energy Carolinas, Inc. (PEC)

Compliance Report

On June 3, 2011, PEC filed its 2010 REPS compliance report in Docket No. E-2, Sub 1000. Also on June 3, 2011, PEC filed an application in the same docket seeking to increase its REPS rider to \$0.63 per month for residential customers, \$7.61 per month for commercial customers, and \$51.54 per month for industrial customers. In its 2010 REPS compliance report, PEC indicated that it acquired sufficient solar RECs to meet the 2010 requirement of 0.02% of its 2009 retail sales. In addition, PEC stated that counting banked RECs, EE projections, contracted future purchases, and the ability to use 25% out-of-state RECs each year, it expects to have sufficient RECs to achieve REPS compliance through 2014. A hearing was held on PEC's 2010 REPS compliance report and 2011 REPS cost recovery rider on September 27, 2011. On November 10, 2011, the Commission issued an Order approving PEC's REPS rider. The Commission concluded that the appropriate REPS rider is \$0.56 per month for the residential class per customer account; \$6.72 per month for the industrial class per customer

⁴ Sec. 1 of Senate Bill 75, amended G.S. 62-133.8(a) by adding a definition of "electricity demand reduction," and Sec. 2 amended G.S. 62-133.8(b)(2) by adding a new subsection (g) making electricity demand reduction a REPS resource, effective April 28, 2011.

account. In the same Order the Commission approved PEC's 2010 Compliance Report.

On June 4, 2012, PEC, in Docket No. E-2, Sub 1020, filed its 2011 REPS compliance report and application for approval of its 2012 REPS cost recovery rider pursuant to G.S. 62-133.8 and Rule R8-67. By its application and testimony, PEC proposes to implement the following total REPS rates effective for service rendered on and after December 1, 2012: \$0.42 per month for residential customers; \$7.28 per month for general service/lighting customers; and \$34.33 per month for industrial customers. PEC's proposed new REPS rider, if approved, will decrease the current REPS rates (including gross receipts taxes and regulatory fee) by \$0.14 per month for residential customers; increase the rate by \$0.56 per month for general service/lighting customers; and decrease the rate by \$11.19 per month for industrial customers. In its 2011 REPS compliance report, PEC indicated that it acquired sufficient solar RECs to meet the 2011 requirement of 0.02% of its 2010 retail sales (7,816 RECs). PEC indicated that it will be able to comply with the 2012 solar set-aside (0.07% of 2011 retail sales), but will be unable to meet its 2012 swine waste and poultry waste set-aside requirements (0.07% of retail sales and 170,000 MWh respectively.) A hearing was held on PEC's 2011 REPS compliance report and 2012 REPS cost recovery rider on September 18, 2012. A final decision is pending before the Commission.

Compliance Plan

On September 4, 2012, in Docket No. E-100, Sub 137, PEC filed its 2011 REPS compliance plan as part of its 2012 Integrated Resource Plan (IRP). In its plan, PEC indicated that its overall compliance strategy to meet the REPS requirements consisted of the following opportunities: (1) PEC ownership of, or purchases from, new renewable energy generation; (2) the use of renewable energy resources at generating facilities; (3) purchases of RECs; and (4) implementation of EE measures. PEC has agreed to provide REPS compliance services for the following wholesale customers, as allowed under G.S. 62-133.8(c)(2)(e): the towns of Black Creek, Lucama, Sharpsburg, Stantonsburg, and the city of Waynesville.

PEC has adopted a competitive bidding process for the purchase of energy or RECs from renewable energy facilities whereby market participants have an opportunity to propose projects on a continuous basis. Through this RFP, PEC has executed a significant number of contracts for solar, hydro, biomass, landfill gas, and out-of-state wind RECs. PEC maintains an open RFP for 10 MW or less of non-solar renewable resources. PEC stated that it does not currently own or operate any new renewable energy facilities. A decision to engage in future direct or partial ownership will be based on cost-effectiveness and portfolio requirements.

PEC engages in ongoing research regarding the use of alternative fuels meeting the definition of renewable energy resources at its existing generation facilities. However, introducing alternative fuels in traditional power plants must be proven technically feasible, reliable, and cost-effective prior to implementation. To the extent PEC determines the use of alternative fuels is appropriate and fits within the framework of Senate Bill 3, these measures would be included in future compliance plan filings.

PEC 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 PV programs. PEC has maintained a commercial PV program since July 2009, with the target of adding 5 MW of solar PV per year. On July 1, 2010, In Docket No. E-2, Sub 979, PEC filed for Commission approval of its Residential Service SunSense Solar Rebate Rider SSR-1 (SunSense). SunSense is an experimental solar PV rebate program aimed at adding 1 MW per year of distributed solar generation. Residential customers who install rooftop solar PV generating systems will receive a one-time participation payment of \$1,000 per kW of installed capacity and monthly bill credits based on the RECs produced by their system. The solar RECs will be the property of PEC. SunSense is limited to 1,000 kW of installed capacity in a calendar year and will be available through December 2015. On November 15, 2010, the Commission issued an Order approving SunSense and granting the participants waivers from several reporting requirements of Commission Rule R8-66 to allow PEC to be the aggregator for information gathering and reporting to the Commission and NC-RETS. PEC initiated SunSense on January 1, 2011.

PEC's primary strategy for compliance with the swine waste set-aside requirement was to jointly procure energy derived from swine waste resources with PEC and other electric power suppliers. PEC stated that the Swine REC Buyers Group issued a joint RFP for swine waste generation and through this RFP executed several contracts that it believed would exceed the statewide aggregate swine waste set-aside requirement. However, PEC stated that in the spring of 2012 the Swine REC Buyers Group terminated several contracts for reasons including consistent failure to develop the project; inability to assign the contract to another developer; and consistent failure to demonstrate progress towards commercial operation. In a recent settlement agreement in Docket No. E-100, Sub 113, with NCSEA, the North Carolina Farm Bureau, the North Carolina Pork Council, and the North Carolina Poultry Federation, PEC indicated that Duke and PEC would begin to search for resources outside of the collaborative effort. PEC has joined the Amended Joint Motion for delay of the swine waste and poultry waste resource requirements until 2014 in Docket No. E-100, Sub 113. In its 2012 compliance plan PEC does not state what year it anticipates it will be able to satisfy the swine waste set-aside.

In regards to compliance with the REPS poultry waste set-aside, PEC, in its 2012 compliance report, states that it is a party to the Amended Joint Motion for delay of the swine waste and poultry waste resource requirements until 2014. In addition, PEC stated that in July, 2010, it joined with other electric suppliers

and issued a Joint Poultry RFP. PEC indentified its pro-rata share in 2014 were the Amended Joint Motion approved as proposed but does not state what year it anticipates it will be able to satisfy the poultry waste set-aside. A hearing was held on the Amended Joint Motion on August 28, 2012.

PEC intends to comply with a portion of the general REPS requirement by energy savings from PEC's EE measures. PEC has received approval for a number of EE programs and has begun implementation. PEC stated that if the programs were to exceed the 25% cap on EE to satisfy the general REPS requirements in 2012, 2013, and 2014, that it would bank the surplus for use in future compliance years. Based on its current contracts, EE programs and banked RECs, PEC believes that it has procured sufficient resources to meet its general REPS obligation.

Duke Energy Carolinas, LLC (Duke)

Compliance Report

On March 12, 2012, in Docket No. E-7, Sub 1008, Duke filed its 2011 REPS compliance report and an application for approval of a REPS rider to be effective September 1, 2012. The application requested a REPS rider of \$0.22 per month for residential customers; \$3.29 per month for general customers (the Duke equivalent of commercial class customers); and \$20.29 per month for industrial customers; each of which is below the incremental cost cap established in G.S. 62-133.8(h). In its 2011 compliance report Duke indicated that it acquired sufficient solar RECs to meet the 2011 requirement of 0.02% of its 2010 retail sales (12,197 RECs). Duke indicated that it will be able to comply with the 2012 solar set-aside (0.07% of 2011 retail sales), but will be unable to meet its 2012 swine waste and poultry waste set-aside requirements (0.07% of retail sales and 170,000 MWh respectively.) A hearing was held on Duke's 2011 compliance report and 2012 REPS cost recovery rider on June 12, 2012. On August 12, 2012, the Commission issued an order approving a REPS rider of \$0.21 per month for residential customers; \$3.18 per month for general customers; and \$19.61 per month for industrial customers, each of which is below the incremental cost cap established in G.S. 62-133.8(h). In the same Order the Commission approved Duke's 2011 compliance report and retired the RECs in Duke's 2011 compliance sub account.

Compliance Plan

On September 4, 2012, in Docket No. E-100, Sub 137, Duke filed its 2012 REPS compliance plan as part of its 2012 IRP. In its plan, Duke stated that it is pursuing REPS compliance by building a diverse portfolio of cost-effective renewable energy and EE resources. The key components of Duke's plan include: (1) introduction of EE programs; (2) purchases of unbundled RECs; (3) continued operations of company-owned renewable facilities; and

(4) research studies to enhance its ability to comply in the future. Duke believes that the implementation of these strategies will yield a diverse portfolio of cost-effective qualifying resources and a flexible mechanism for REPS compliance. Duke has agreed to provide REPS compliance services for the following wholesale customers, as allowed under G.S. 62-133.8(c)(2)(e): Rutherford EMC; Blue Ridge EMC; the cities of Concord, Dallas, Forest, and Kings Mountain; and the Town of Highlands.

Duke stated that it is confident that it will meet its solar set-aside requirement under its 2012 REPS obligation. Duke has elected to pursue the following courses of action to acquire solar resources for compliance: (1) Duke-owned solar PV distributed generation program; (2) power purchase agreements for solar generation; and (3) purchase of in-State and out-of-state unbundled solar RECs, including RECs from solar thermal facilities. With respect to utility-owned solar resources, Duke received approval from the Commission in 2009 to build, own, and operate up to 10 MW of solar PV projects on customer sites and/or utility-owned property. Duke began construction in the fourth quarter of 2009 and the program was fully implemented in the first guarter of 2011, with the exception of 50 kW. However, a fire at one of the rooftop installations in April 2011, caused Duke to shut down all the facilities in the program. During 2011, and part of 2012, Duke voluntarily disconnected seventeen of the twenty-five distributed generation program sites in order to retrofit the installations with safety enhancements. Since that time all the sites have been reenergized and Duke stated that the unplanned outage will not adversely affect its ability to meet its solar set-aside obligations. In Addition, Duke has executed multiple solar REC purchase agreements with third parties for both out-of-state and in-State solar PV and solar thermal RECs.

Duke's primary strategy for compliance with the swine waste set-aside requirement was to jointly procure energy derived from swine waste resources with PEC and other electric power suppliers. However, in a recent settlement agreement in Docket No. E-100, Sub 113, with NCSEA, the North Carolina Farm Bureau, the North Carolina Pork Council, and the North Carolina Poultry Federation, Duke indicated that Duke and PEC would begin to search for resources outside of the collaborative effort. In its compliance plan Duke stated that it has been unable to secure sufficient RECs to satisfy its swine waste set-aside requirements in 2012 and 2013, and that it may be able to meet its 2014 requirement, but that compliance is subject to multiple variables, particularly counterparty achievements of projected delivery requirements and commercial operation milestones. Duke has joined the Amended Joint Motion for delay of the swine waste and poultry waste resource requirements until 2014 in Docket No. E-100, Sub 113, and stated that the petitioners proposed delayed schedule is possible to achieve, caveated by the same variables discussed above.

Additionally, Duke stated in its 2012 compliance plan that it will be unable to secure enough RECs to meet its poultry waste set-aside requirements in 2012 and 2013, and that compliance in 2014 is unlikely. Again, Duke has joined the Amended Joint Motion for delay of both the swine waste and poultry waste resource requirements until 2014, and stated that the petitioners proposed delayed schedule is possible to achieve, provided counterparties reach commercial operation and deliver expected REC quantities in line with current expectations. A hearing was held on the Amended Joint Motion on August 28, 2012.

Aside from the solar, swine waste, and poultry waste set-aside requirements, Duke intends to meet the general REPS requirement in 2012, 2013, and 2014 with EE savings, hydroelectric power, biomass resources, out-of-state wind RECs, and solar resources. Duke projects that it will utilize EE savings to meet 25% of its general REPS requirements, the maximum percentage allowable under the statute. Duke plans to use hydroelectric power from three sources to meet the general REPS requirement: (1) small Duke-owned hydroelectric stations; (2) wholesale customers' SEPA allocation; and (3) hydroelectric facilities that have received Qualifying Facility status. Duke stated that it is evaluating a variety of biomass proposals, including landfill gas, CHP facilities, and biomass combustion facilities. Duke noted that reliance on direct combustion biomass has decreased in its long term planning due to uncertainty around the developable potential of such resources in North Carolina and uncertainty concerning various EPA rulemakings. Duke also plans to meet a portion of the general requirement with RECs from wind facilities, noting that land-based facilities could appear in North and South Carolina in the next decade and that out-of-state RECs exist. Finally, Duke's 2012 compliance plan stated that it plans to meet a portion of the general requirement with RECs from solar facilities, a method not stated in its 2011 compliance plan. Duke stated that the downward trend in solar equipment and installation costs over the past several years is a positive development, and that while some uncertainty exists over supportive policies and future cost declines. Duke fully expects solar resources to contribute to its compliance efforts beyond the solar set-aside. Based on its compliance plan, which Duke stated contains a diversified balance of renewable resources; Duke stated that it will be able to meet its general REPS obligation through 2014.

Dominion North Carolina Power (Dominion)

Compliance Report

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

obligation, at least 75% of the RECs purchased were in-State RECs, as required by G.S. 62-133.8(b)(2)(e). On December 15, 2011, the Commission issued an Order approving Dominion's 2010 REPS compliance report and requesting that Dominion file a verified attestation of Windsor's 2009 retail sales and the status of that information with NC-RETS.

On August 10, 2012, in Docket No. E-22, Sub 486, Dominion filed its 2011 REPS compliance report. The report included compliance status for the Town of Windsor. Dominion stated that it met its 2010 REPS solar set-aside obligation (866 RECs) by purchasing unbundled out-of-state solar RECs. For the Town of Windsor's obligation (11 RECs), at least 75% of the RECs purchased were in-State RECs, as required by G.S. 62-133.8(b)(2)(e). Dominion stated that it has entered into contracts to purchase enough solar RECs to satisfy its compliance obligations through 2014. Dominion stated that it will not be able to meet the swine waste set-aside requirements in G.S. 62-133.8(e) and doubts that any swine waste renewable energy facilities will be in operation by 2013. Dominion further stated that because it can acquire out state poultry RECs, it will be able to fulfill 25% of that requirement for the Town of Windsor through out-of-state RECs. Dominion has joined the Amended Joint Motion in Docket No. E-100, Sub 113, to delay the poultry waste and waste requirements until 2014.

Compliance Plan

On August 31, 2012, in Docket No. E-100, Sub 137, Dominion filed its 2012 REPS compliance plan as part of its 2012 IRP. In its plan, Dominion stated that it intends to meet its general REPS requirements through the use of new company-generated renewable energy where economically feasible, EE, and unbundled RECs. Dominion reiterated its responsibility to meeting the REPS requirements for its wholesale customer the Town of Windsor.

Dominion used unbundled solar RECs to meet its 2011 solar requirements and has entered into contracts to purchase sufficient RECs through 2014 to fully satisfy the solar set-aside requirement, as well as satisfy 35% of the solar set-aside requirements for 2015 through 2017. Dominion noted it had also entered contracts to satisfy the solar set-aside requirement for the Town of Windsor through 2014 and that 75% of those RECs were from in-State facilities. As determined in the Commission's September 22, 2009 Order in Docket No. E-100, Sub 113, Dominion is exempt from the 25% limit on the use of out-of-state RECs for REPS compliance found in G.S. 62-133.8(b)(2)(e). Dominion stated that it had purchased solar RECs for REPS compliance from out-of-state to minimize compliance costs.

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 notes 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 has doubts that any RECs will be available by 2013. Dominion has joined the Amended Joint Motion for delay of the swine waste and poultry waste resource requirements until 2014 in Docket No. E-100, Sub 113.

Dominion is also participating in the Poultry Waste REC Buyers Group, which has executed two long term poultry waste contracts; as a part of this group Dominion has executed two long term contracts to satisfy the Town of Windsor's in-State requirements. As described above, 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 entered two poultry waste REC contracts with enough volume to comply with its out-of-state requirements for 2012 through 2014. Dominion stated it will be able to meet its 2012-2014 poultry waste REPS requirements and will be able to meet 25% of the Town of Windsor's. However, as stated above, Dominion has joined 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.

Dominion did not file an application for a REPS rider in 2011, and has again elected not to file an application for a REPS rider in 2012.

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,⁵ 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

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

⁵ Effective May 1, 2010, Blue Ridge EMC is no longer a member of GreenCo.

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.⁶

Electric Membership Corporations

GreenCo Solutions, Inc. (GreenCo)

On September 1, 2010, in Docket No. E-100, Sub 128, GreenCo filed its 2009 REPS compliance report for the twenty-three EMC members that GreenCo served during 2009.⁷ GreenCo's report stated, among other points, that it had secured adequate resources to meet its solar set-aside obligation for 2010. On January 24, 2011, the Commission held a public hearing on the 2010 IRPs filed by PEC, Duke and Dominion and the REPS compliance reports filed by all the electric power suppliers. The Commission subsequently received comments, reply comments, proposed orders and briefs from the parties. On February 20, 2012, the Commission issued an Order approving GreenCo's 2009 compliance report. The Order also requested that GreenCo develop work papers documenting energy savings reported in its 2009 compliance report and that the Public Staff shall summarize these in its comments on GreenCo's 2010 compliance report.

On September 19, 2011, in Docket No. E-100, Sub 128, GreenCo filed its 2011 REPS compliance plan and 2010 REPS compliance report with the Commission on behalf of its member EMCs, as well as Mecklenburg Electric Cooperative and Broad River Electric Cooperative. In its plan, GreenCo stated that it intends to use its members' allocations from SEPA, RECs purchased from both in-State and out-of-state renewable energy facilities, and EE savings from eleven recently approved EE programs to meet its members' REPS obligations. In addition, GreenCo is continuing to work with the collaborative of other electric

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

⁷ The following EMCs are members of GreenCo: Albemarle EMC, Brunswick EMC, Cape Hatteras EMC, Carteret-Craven EMC, Central EMC, Edgecombe-Martin County EMC, Four County EMC, French Broad EMC, Haywood EMC, Jones-Onslow EMC, Lumbee River EMC, Pee Dee EMC, Piedmont EMC, Pitt & Greene EMC, Randolph EMC, Roanoke EMC, South River EMC, Surry-Yadkin EMC, Tideland EMC, Tri-County EMC, Union EMC, and Wake EMC. Effective May 1, 2010, Blue Ridge EMC is no longer a member of GreenCo. The REPS obligations of Mecklenburg Electric Cooperative, headquartered in Chase, Virginia, and Broad River Electric Cooperative, headquartered in Gaffney, South Carolina, are aggregated with the GreenCo members in its REPS compliance plan.

power suppliers to meet the swine waste and poultry waste set-aside requirements. GreenCo further stated that it plans to evaluate the potential of other EE programs to provide energy savings that could be utilized for REPS compliance. In its 2010 REPS compliance report, GreenCo stated that it secured adequate resources to meet the solar set-aside obligation for 2010. Lastly, for 2010, the REPS incremental costs incurred by GreenCo's members were significantly less than the costs allowed under the per-account cost cap in G.S. 62-133.8(h). The Commission issued an Order on May 14, 2012, retiring the RECs in GreenCo's 2010 compliance sub-accounts. The Commission issued an Order on May 30, 2012, approving GreenCo's 2011 compliance plan.

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 member EMCs, as well as Mecklenburg Electric Cooperative and Broad River Electric Cooperative. In its plan, GreenCo stated that it intends to use its members' allocations from SEPA, RECs purchased from both in-State and out-of-state renewable energy facilities, and EE savings from eleven recently approved EE programs to meet its members' REPS obligations. GreenCo submitted a M&V plan for the EE programs in both its 2012 compliance plan, as well as its 2011 compliance report, and stated that it would not use any RECs associated with the programs in its 2011 compliance, nor would it seek to use any RECs in future vears from the program until the M&V plan has been approved by the Commission. GreenCo stated that despite its continued work in collaborative efforts with other electric power suppliers to meet the swine waste and poultry waste set-aside REPS requirements that it does not anticipate complying until 2014. GreenCo has joined 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. In its 2011 REPS compliance report, GreenCo stated that it secured adequate resources to meet the solar set-aside obligation for 2011. Lastly, for 2011, the REPS incremental costs incurred by GreenCo's members were significantly less than the costs allowed under the per-account cost cap in G.S. 62-133.8(h).

EnergyUnited Electric Membership Corporation (EnergyUnited)

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

current EE programs as well as continuing to educate its members on EE. The Commission issued an Order on May 14, 2012, retiring the RECs in EnergyUnited's 2010 compliance sub-accounts. The Commission issued an Order on May 30, 2012, approving EnergyUnited's 2011 compliance plan.

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 2012 REPS compliance report with the Commission. In its report, EnergyUnited stated that it met its 2011 solar set-aside requirement by purchasing 488 solar RECs. In its 2012 compliance plan, EnergyUnited stated that it plans to fulfill its general REPS requirement in 2012 and beyond through the use of landfill gas generation (through 2012, with an option to extend the contract); RECs from its SEPA allocation; the purchase of RECs; and its two approved EE programs. EnergyUnited stated that it has already accumulated enough general RECs to meet its 2012 requirement (72,134), and anticipates accumulating enough RECs to meet its obligation for many years into the future. EnergyUnited stated that it is participating with other electric utilities to jointly procure RECs to satisfy the swine waste set-aside requirements. EnergyUnited also stated that it is participating with other electric utilities to jointly procure RECs to satisfy the poultry waste set-aside requirements. EnergyUnited stated that it has contracted for out-of-state poultry RECs that would be eligible to satisfy a portion of its poultry waste set-aside requirement. However, EnergyUnited cited a lack of sufficient resources and stated that it has joined 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.

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 Power Board.

On August 31, 2011, in Docket No. E-100, Sub 131, TVA filed its 2011 REPS compliance plan and 2010 REPS compliance report with the Commission. With regard to its cooperatives' solar set-aside obligation, TVA reiterated its plans to meet the requirement by generating the energy at its facilities and facilities owned by others, and/or purchasing solar RECs. For the general 2012 REPS goal of 3%, TVA will meet this requirement by a combination of wind RECs, hydro generation, DSM and EE. TVA met its cooperatives' 2010 solar set-aside requirement by purchasing solar RECs. The Commission issued an Order on May 14, 2012, retiring the RECs in TVA's 2010 compliance sub-accounts.

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. In its plan, TVA indicated its intent to fulfill the general REPS requirement in 2012 through 2014 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 obligation in years 2012 through 2014, TVA reiterated its plans to meet the requirement by generating the energy at its facilities and facilities owned by others, and/or purchasing solar RECs. In its report TVA stated it had satisfied its 2011 solar set-aside requirement through the generation of solar energy and the purchase of solar RECs. TVA stated that it believes that the 2012 and 2013 swine waste and poultry waste set-aside requirements will be delayed until 2014. TVA further stated that if the swine waste and poultry waste set-asides are not delayed TVA will attempt to purchase RECs to comply.

Halifax Electric Membership Corporation (Halifax)

On May 11, 2010, the Commission established Docket No. EC-33, Sub 58, ordering Halifax to file a copy of its 2008 REPS compliance report, and scheduled a hearing for August 11, 2010. Halifax serves the Town of Enfield and included Enfield's REPS requirement in its report. On May 3, 2011, the Commission issued an Order concluding that Halifax's report did not comply with the requirements of G.S. 62-133.8 and Commission Rule R8-67, mainly because Halifax had allocated the costs of DSM and EE programs that pre-dated Senate Bill 3 as incremental REPS compliance costs. The Commission held that energy savings from existing EE programs can be counted toward the REPS requirements, but the costs of existing programs are not incremental costs under G.S. 62-133.8(h). The Commission stated, however, that Halifax may be allowed in future proceedings to prove that it has incurred incremental costs associated with new DSM/EE programs, but the reasonableness of such incremental costs will be weighed against Halifax's obligation under G.S. 62-133.9(b) to provide the "least cost mix of demand reduction and generation measures" in serving its customers. The Commission ordered Halifax to file revised 2008 and 2009 REPS compliance reports consistent with the Commission's Order by September 1, 2011.

On August 29, 2011, in Docket No. EC-33, Sub 58, Halifax filed updates to its 2008 and 2009 REPS compliance reports. With regard to the Commission's concern that Halifax's Energy Star Heat Pump Rebate Program (Rebate Program), from which Halifax estimated it earned approximately 11.3 EE RECs in 2008, had not been approved by the Commission. Halifax recounted the history of the Rebate Program, including its approval by Halifax on December 21, 1989, following the Commission's approval of NCEMC's application to offer a heat pump rebate program for new and existing construction in Docket No. EC-67, Sub 4, on October 25, 1989. Halifax was a member of NCEMC at this time and has operated its Rebate Program under the assumption that the approval of NCEMC's application by the Commission was approval of Halifax's Program. Therefore, Halifax requested that the Commission find that the approval of the NCEMC rebate program in Docket No. EC-67, Sub 4, constituted approval of Halifax's Rebate Program. In addition, Halifax's report included amendments to its 2008 and 2009 REPS reports, including adjustments to the cost of some EE programs and REC balances. On February 20, 2012, the Commission issued an Order approving Halifax's 2008 and 2009 REPS compliance reports.

On October 15, 2010, in Docket No. E-100, Sub 128, Halifax filed its 2010 REPS compliance plan and 2009 REPS compliance report, again including the Town of Enfield's REPS requirement in its plan. Halifax's 2010 REPS compliance plan stated that Halifax's 2010 solar set-aside requirement was 38,740 kWh, and its plan for meeting the requirement was to purchase solar RECs. For 2011, Halifax's solar set-aside requirement was projected to be 39,097 kWh, and Halifax's plan for meeting the requirement was to generate the energy at its 98.56 kW solar PV facility to be completed in the later part of 2010. For the general 2012 REPS goal of 3%, Halifax projected its requirement to be 5,923 MWh. In addition to the swine waste and solar set-aside portion, this requirement will be met by a combination of SEPA allocations, wind RECs, and EE. The Commission issued an Order on May 14, 2012, stating that Halifax shall revise its 2010 compliance sub-account with NC-RETS to list Enfield as an aggregated utility and at that time the RECs in that account shall be retired.

On September 1, 2011, in Docket No. E-100, Sub 128, Halifax filed its 2011 REPS compliance plan and 2010 REPS compliance report with the Commission. In its compliance plan, Halifax stated that it intends to meet its REPS requirements with a combination of SEPA allocations, EE programs, solar energy production, solar and wind RECs and additional resources to be determined on an ongoing basis. Further, Halifax noted that it is a participant in the collaborative effort of electric power suppliers to meet the swine waste and poultry waste set-aside requirements. With regard to its 2010 solar set-aside obligation, Halifax met that requirement by generating solar energy on its 98.56 kW solar PV system and purchasing solar RECs. The Commission issued an Order on May 30, 2012, approving Halifax's 2011 compliance plan.

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. 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 is a participant in the collaborative effort of electric power suppliers to meet the swine waste and poultry waste set-aside requirements, but also noted that the swine group's future is uncertain and that Halifax has begun to look for swine RECs on its own to satisfy the 2012 swine waste set-aside requirement. Halifax stated that compliance with its 2012 poultry waste set-aside requirement is uncertain. With

regard to its 2011 solar set-aside obligation, Halifax met that requirement by generating solar energy on its 98.56 kW solar PV system and purchasing solar RECs.

Municipally-owned electric utilities

North Carolina Eastern Municipal Power Agency (NCEMPA)

On August 3, 2010, in Docket No. E-48, Sub 6, the Commission held a hearing to consider NCEMPA's 2008 REPS compliance report. On May 3, 2011, the Commission issued an Order concluding that NCEMPA's report did not comply with the requirements of G.S. 62-133.8 and Commission Rule R8-67 for several reasons. First, NCEMPA allocated the costs of DSM and EE programs that pre-dated Senate Bill 3 as incremental REPS compliance costs. The Commission held that energy savings from existing DSM/EE programs can be counted toward the REPS requirements, but the costs of existing programs are not incremental costs under G.S. 62-133.8(h). The Commission stated, however, that NCEMPA may be allowed in future proceedings to prove that it has incurred incremental costs associated with new DSM/EE programs, but the reasonableness of such incremental costs will be weighed against NCEMPA's obligation under G.S. 62-133.9(b) to provide the "least cost mix of demand reduction and generation measures" in serving its customers. Second, the Commission concluded that it is inappropriate for NCEMPA to include net lost revenues as a cost of REPS compliance. The Commission reasoned that municipal electric suppliers should not be influenced by the possibility that DSM/EE programs will reduce their electric revenues. Even though a municipal electric supplier's recovery of fixed costs will come from fewer kWh sales, perhaps resulting in increased rates, the DSM/EE savings will result in a net benefit to its customers. Third, the Commission held that as a general rule a municipal electric supplier cannot rely on its wholesale provider's REPS compliance to satisfy the municipal supplier's REPS obligation. The Commission opined that G.S. 62-133.8(c)(2)(e) does not reduce or eliminate the REPS obligations of NCEMPA's members merely because the members purchase power from PEC and PEC meets its REPS obligations. An exception noted by the Commission is where the wholesale provider in fact increases its REPS compliance to include the municipal provider's REPS retail sales requirement. In addition, the Commission held that EE RECs reported by NCEMPA are subject to M&V based on the submission of further M&V data and the resolution of M&V issues pending in Docket No. E-100, Sub 113, with regard to reduced energy consumption. The Commission ordered NCEMPA to file revised 2008 and 2009 REPS compliance reports consistent with the Commission's Order by September 1, 2011.

On August 31, 2011, in Docket No. E-100, Sub 131, NCEMPA filed with the Commission, on behalf of its members, a 2011 REPS compliance plan and 2010 REPS compliance report, along with revised 2008 and 2009 REPS

compliance reports. In its 2011 compliance plan, NCEMPA stated that its members are prohibited from purchasing, generating, or using renewable energy, including purchases from hydroelectric power facilities (other than its members' SEPA allocations), at least until 2018, under NCEMPA's power supply contract with PEC. NCEMPA stated that its members will meet their REPS requirements by purchasing RECs, as well as utilizing SEPA allocations and EE/DSM savings. NCEMPA identified a number of EE/DSM programs that its members may implement to produce energy savings for REPS compliance. NCEMPA stated that it has entered into contracts to purchase various types of RECs and will continue to investigate the market for unbundled RECs as a cost-effective means of REPS compliance. NCEMPA met its 2010 solar set-aside requirement by purchasing solar RECs. NCEMPA has executed contracts to purchase sufficient solar RECs to meet its requirements through 2013. Finally, NCEMPA estimates that its incremental costs for REPS compliance will be less than its per-account cost cap in 2011 through 2013. The Commission issued an Order on May 14, 2012, retiring the RECs in NCEMPA's 2010 compliance sub-accounts.

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. In its 2012 compliance plan, NCEMPA stated that its members have no plans to generate electric power at a renewable energy facility. NCEMPA stated that its members will meet their REPS requirements by purchasing RECs, as well as utilizing SEPA allocations and EE programs. The EE programs include a Home EE Kit designed 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 has entered into contracts to purchase various types of RECs and will continue to investigate the market for unbundled RECs as a cost-effective means of REPS compliance. In its compliance report NCEMPA stated that it met its 2011 solar set-aside requirement 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 2014. NCEMPA stated that despite its continued work in collaborative efforts with other electric power suppliers to meet the swine waste set-aside REPS requirements that it does not anticipate complying until 2014. Additionally, NCEMPA stated that despite entering into contracts for both in-State and out-of-state poultry RECs it is unlikely that they will be able to comply in 2012. NCEMPA has joined 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. Finally, NCEMPA estimates that its incremental costs for REPS compliance will be substantially less than its per-account cost cap in 2012 through 2014.

North Carolina Municipal Power Agency No. 1 (NCMPA1)

On July 27, 2010, in Docket No. E-43, Sub 6, the Commission held a hearing to consider NCMPA1's 2008 REPS compliance report. On May 3, 2011,

the Commission issued an Order concluding that NCMPA1's report did not comply with the requirements of G.S. 62-133.8 and Commission Rule R8-67, mainly because NCMPA1 did not allocate the costs of acquiring RECs in 2008 to NCMPA1's 2008 REPS costs. Rather, NCMPA1 asserted that it had no REPS obligation in 2008 and, therefore, should defer its allocation of the RECs costs until the RECs are retired for compliance with G.S. 62-133.8. The Commission disagreed, holding that NCMPA1's obligation to meet the general 3% REPS target beginning in 2012 necessitated that NCMPA1 plan for compliance with its REPS obligation by purchasing and banking RECs in 2008 through 2011, and, therefore, the cost of those 2008 RECs should be allocated in 2008. Among other points, the Commission noted that G.S. 62-133.8(b)(2)(f) and (c)(2)(f) authorize electric power suppliers to purchase RECs during 2008 through 2011 and G.S. 62-133.8(h)(4) sets cost caps for 2008 through 2011, even though there is no general REPS obligation during those years. In addition, the Commission held that EE RECs reported by NCMPA1 are subject to M&V based on the submission of further M&V data and the resolution of M&V issues pending in Docket No. E-100, Sub 113, with regard to reduced energy consumption. The Commission ordered NCMPA1 to file revised 2008 and 2009 REPS compliance reports consistent with the Commission's Order by September 1, 2011.

On August 31, 2011, in Docket No. E-100, Sub 131, NCMPA1 filed with the Commission, on behalf of its members, a 2011 REPS compliance plan and 2010 REPS compliance report, along with revised 2008 and 2009 REPS compliance reports. In its 2011 REPS compliance plan, NCMPA1 stated that, in addition to the implementation of DSM and EE programs by its members, NCMPA1 intends to investigate and develop new renewable energy facilities; review proposals for renewable resources, including biomass, hydro, solar and wind; and negotiate and execute agreements for cost-effective resources. NCMPA1 intends to continue to investigate local, regional, and national markets for cost-effective RECs and may consider issuing an RFP for RECs. NCMPA1 met its 2010 REPS solar set-aside requirement by a combination of purchases of energy from solar facilities and purchases of solar RECs. In addition, it has contracts for the acquisition of sufficient solar RECs to meet its requirements through 2012, and issued an RFP for additional solar resources in July, 2011. Further, NCMPA1 intends to identify development opportunities for additional solar facilities to be located within its members' service areas or at municipal customer locations and investigate various other regional supply-side options. Finally, NCMPA1 estimates that its incremental costs for REPS compliance will be less than its per-account cost cap in 2011 through 2013. The Commission issued an Order on May 14, 2012, retiring the RECs in NCMPA1's 2010 compliance sub-accounts.

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. In its 2012 compliance plan, NCMPA1 stated that it intends to investigate and develop, as applicable, new renewable energy

facilities. NCMPA1 stated that its members will 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 has entered into contracts to purchase various types of RECs and will continue to investigate the market for unbundled RECs as a cost-effective means of REPS compliance. In its compliance report NCMPA1 stated that it met its 2011 solar set-aside requirement by purchasing electricity from solar generating facilities and through the purchase of solar RECs. In its compliance plan NCMPA1 stated that it has entered into contracts for enough RECs to satisfy the solar set-aside requirement through 2014. NCMPA1 stated that despite its continued work in collaborative efforts with other electric power suppliers to meet the swine waste set-aside REPS requirements that it does not anticipate complying until 2014. Additionally, NCMPA1 stated it has entered into contracts for both in-State and out-of-state poultry RECs to satisfy its obligations for 2012 through 2014. Despite this, NCMPA1 has joined 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. Finally, NCMPA1 estimates that its incremental costs for REPS compliance will be less than its per-account cost cap in 2012 through 2014.

Fayetteville Public Works Commission (FPWC)

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

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

After noting two additional exceptions, the Public Staff recommended that the Commission approve FPWC's 2009 compliance report.

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

On April 30, 2012, FPWC filed a revised 2009 REPS compliance report in Docket No. E-100, Sub 129. FPWC also filed a revised 2010 REPS compliance report on April 30, 2012, in Docket No. E-100, Sub 131. In both filings, FPWC proposed to amend its REPS reports to exclude electric use and accounts associated with electricity used by other municipal departments of the City of Fayetteville (City), including City water and sewer operations. On May 8, 2012, and May 10, 2012, the Public Staff filed comments in the above-captioned dockets opposing FPWC's proposal to amend it 2009 and 2010 REPS compliance reports. On May 14, 2012, the Commission issued an Order finding that the 423 solar RECs FPWC had placed in its 2010 REPS compliance sub-account in the NC-RETS corresponded to the highest 2009 retail sales figure that had been posited for FPWC, and that FPWC's proposed revised 2010 REPS compliance report did not propose a revised number of RECs for FPWC's 2010 REPS compliance. The Commission concluded that FPWC had complied with its 2010 REPS obligation. Subsequently the Commission permanently retired the 423 solar RECs that were in FPWC's 2010 NC-RETS compliance sub-account.

On May 30, 2012, FPWC filed a motion for reconsideration of the Commission's May 14, 2012 Order. FPWC asked the Commission to defer retirement of 22 of the 423 solar RECs it had placed in its 2010 NC-RETS compliance sub-account until the Commission "resolves the pending dispute as to the proper level of retail electric sales that are attributable to FPWC in 2009 for purposes of calculating FPWC's 2010 REPS obligation." Also on May 30, 2012, FPWC filed a reply to the Public Staff's comments. On June 12, 2012, the

Commission issued an Order finding that it is necessary to address this issue on a generic basis and requesting comments from all parties that have been involved in the REPS rulemakings, in addition to specific informational requests to FPWC. On July 31, 2012, FPWC filed a response to the Commission's June 12, 2012 Order. On July 30, 2012, and August 1, 2012, NCSEA and Public Staff respectively filed comments opposing FPWC's motion for reconsideration. On August 1, 2012, NCEMPA, and NCMPA1 filed comments in support of the motion. The matter is still pending before the Commission.

On August 21, 2012, in Docket No. E-100, Sub 135, FPWC filed a motion for an extension of time to file its 2011 compliance report and 2012 compliance plan. On August 27, 2012, in the same docket the Commission issued an Order granting FPWC an extension to file its report and plan until September 24, 2012.

Oak City

On September 2, 2011, in Docket No. E-100, Sub 131, Oak City filed its 2011 REPS compliance plan and 2010 REPS compliance report. Oak City's compliance plan stated that it will continue to consider EE options, but will need to purchase RECs to meet its requirements during the next few years. In addition, the town's swine waste and poultry waste set-aside portion is so small that it does not plan to participate in the negotiations being conducted by the larger electric suppliers. However, the town will consider purchasing swine and poultry RECs if any are available. Oak City's 2010 REPS compliance report stated that it acquired one solar REC to meet the 2010 solar set-aside requirement. On May, 14, 2012, the Commission issued an Order in Docket No. E-100, Sub 131, stating that Oak City had met its 2010 REPS obligation, and that subject to the submission of a verification form, Oak City's compliance sub-account was to be retired.

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 EMC (EMEMC), its wholesale provider, to meet the Town's REPS requirement. EMEMC utilizes GreenCo as its compliance agent, Oak City expects the transition to be complete at the end of 2012. Oak City stated that beginning January 1, 2013, it will compensate EMEMC for the cost of compliance moving forward. To satisfy 2012 obligations Oak City intends to purchase solar and generic RECs, as well as swine and poultry RECs if available. Oak City's 2011 REPS compliance report stated that it acquired one solar REC to meet its 2011 solar set-aside requirement.

<u>Winterville</u>

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

On 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 on the market and the expense of EE programs. Winterville indicated that it has not purchased any RECs yet for 2012 compliance, but that it expects to purchase RECs in August through November of 2012. Winterville has not participated in the joint buyers groups for swine or poultry RECs, but indicates that it is willing to purchase swine and poultry RECs from other utilities or on the market if available. Winterville has 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 obligation by purchasing solar RECs.

Town of Fountain (Fountain)

Fountain did not file a REPS compliance report for 2008 or 2009, or a REPS compliance plan in 2008, 2009, or 2010. On June 22, 2011, in Docket No. E-100, Sub 129, the Commission issued an Order requiring Fountain to file its 2008, 2009, and 2010 REPS compliance reports, as well as its 2010 and 2011 REPS compliance plans, by September 1, 2011. On September 20, 2011, the Commission received a letter from Fountain's attorney stating that Fountain had assumed that REPS reports on its behalf were being filed by Fountain's electric supplier, Pitt-Greene EMC. However, Fountain recently learned that this was not the case. The letter stated that Fountain is working on the REPS reports and will submit them no later than December 31, 2011. Fountain took no actions to comply with the REPS requirements until late 2011, based on this knowledge and a desire for efficiency the Commission issued an Order on February 21, 2012, in Docket No. E-100, Sub 129, waiving Fountain's reporting requirements for 2008 and 2009.

On October 25, 2011, Fountain filed its 2011 compliance plan and 2010 compliance report. Fountain's report stated that its 2010 REPS compliance obligation was one solar REC, which is consistent with the sales figure provided by the Public Staff. Fountain did not meet its 2010 REPS requirement during 2010. The report stated that Fountain bought two solar RECs in October of 2011 and proposed that they be used to meet its 2010 and 2011 REPS requirements. The records in NC-RETS show that Fountain transferred two solar RECs into a compliance sub-account labeled "2010-2011 Compliance." Fountain also noted that given its small size, and the potential cost, it would not participate in the collaborative effort to acquire swine and poultry RECs, but would purchase such RECs to satisfy its future requirements if available. Fountain stated it intended to comply with future REPS obligations through the purchase of RECs, again given its small size, the town stated they may be able to fulfill its obligations.

On May 14, 2012, the Commission issued an Order in Docket No. E-100, Sub 131, stating that Fountain's 2010-2011 compliance sub-account in NC-RETS shall be maintained in "pending" status until the Commission reviews Fountain's 2011 REPS compliance. Based on Fountain's compliance report and its records in NC-RETS, the Commission found that Fountain should have acquired at least one solar REC in 2010, but that it did not do so until 2011. Fountain was also late in filing its 2010 REPS compliance report. However, because Fountain took actions to come into compliance the Commission found that Fountain met its 2010 REPS obligation.

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 from renewable energy suppliers. Fountain's report stated that its 2011 REPS compliance obligation 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 did not participate in the collaborative effort to acquire swine and poultry RECs, nor was it 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 its future requirements if available.

Wholesale Providers Meeting REPS Requirements

PEC, as the wholesale provider, has agreed to meet the REPS requirements for the towns of Black Creek, Lucama, Sharpsburg, Stantonsburg, and the city of Waynesville. Similarly, Duke 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.

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 2,000 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 the 2010, and appear to have met the 2011, solar set-aside requirement of Senate Bill 3. All of the electric power suppliers appear on track to meet the general REPS requirements coming into effect in 2012. However, they do not appear on track to meet the poultry waste and swine waste set-asides for 2012 and have filed a motion to delay implementation of that section of the REPS, a matter still pending before the Commission. In addition, as stated in the 2011 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' obligations under the set-aside provisions, the eligibility of renewable energy facilities and resources to meet the set-aside provisions, etc. If the plain language of the statute was ambiguous, the Commission attempted to discern the intent of the General Assembly in reaching its decision on the proper interpretation of the statute.

APPENDICES

APPENDICES

- 1. New Legislation and Environmental Review
 - Session Law 2011-55 (Senate Bill 75)
 - Session Law 2011-279 (Senate Bill 484)
 - Session Law 2011-309 (Senate Bill 710)
 - Session Law 2011-394 (House Bill 119)
 - Letter from Chairman Edward S. Finley, Jr., North Carolina Utilities Commission, to Secretary Dee Freeman, North Carolina Department of Environment and Natural Resources (July 19, 2012)
 - Letter from Robin W. Smith, Assistant Secretary for Environment, North Carolina Department of Environment and Natural Resources, to Chairman Edward S. Finley, Jr., North Carolina Utilities Commission (September 18, 2012)
- 2. Rulemaking Proceeding to Implement Session Law 2007-397
 - Order Requiring EMCs and Municipal Power Supplier to File M&V Plans for EE and DSM Plans, Docket No. E-100, Sub 113 (May 14, 2012)
 - Order Amending Rules Governing Filing Requirements for New Electric Generation Facilities, Docket E-100 Sub 134 (July 30, 2012)
- 3. Renewable Energy Facility Registrations
 - Order Accepting Registration of New Renewable Energy Facilities and on Requests for Waivers, Docket Nos. RET-11, Sub 0, et al. (October 21, 2011)

- Order Denying Registration of a Concentrated Solar Power Thermal System as a New Renewable Energy Facility, Docket No. RET-28, Sub 0 (December 22, 2011)
- Orders Granting Certificate of Public Convenience and Necessity and Accepting Registration as a New Renewable Energy Facility for Land Based Coastal Wind Facilities, Docket Nos. EMP-49, Sub 0, and EMP-61, Sub 0 (May 3, 2011, and March 8, 2012).
- Order Accepting Directed Biogas as a Renewable Energy Resource, Docket No. SP-100, Sub 29 (March 21, 2012).
- Order Noticing the Intent to Revoke Registration as a New Renewable Energy Facility for CHP Facility Not Producing Electricity Net of Station Use, Docket No. SP-729, Sub 1 (August 10, 2012).
- Order Noticing the Intent to Revoke Registration as a New Renewable Energy Facility for CHP Facility, Docket No. SP-729, Sub 1 (September 17, 2012)
- Order Revoking Registrations of New Renewable Energy Facilities, Docket No. E-100, Sub 130 (September 26, 2012)

APPENDIX 1

GENERAL ASSEMBLY OF NORTH CAROLINA SESSION 2011

SESSION LAW 2011-55 SENATE BILL 75

AN ACT TO PROMOTE THE USE OF ELECTRICITY DEMAND REDUCTION TO SATISFY RENEWABLE ENERGY PORTFOLIO STANDARDS.

The General Assembly of North Carolina enacts:

SECTION 1. G.S. 62-133.8(a) is amended by adding a new subdivision to read:

- "(3a) "Electricity demand reduction" means a measurable reduction in the electricity demand of a retail electric customer that is voluntary, under the real-time control of both the electric power supplier and the retail electric customer, and measured in real time, using two-way communications devices that communicate on the basis of standards."
- **SECTION 2.** G.S. 62-133.8(b) reads as rewritten:

"(b) Renewable Energy and Energy Efficiency Standards (REPS) for Electric Public Utilities. –

(1) Each electric public utility in the State shall be subject to a Renewable Energy and Energy Efficiency Portfolio Standard (REPS) according to the following schedule:

REPS Requirement
3% of 2011 North Carolina retail sales
6% of 2014 North Carolina retail sales
10% of 2017 North Carolina retail sales
12.5% of 2020 North Carolina retail sales

- (2) An electric public utility may meet the requirements of this section by any one or more of the following:
 - a. Generate electric power at a new renewable energy facility.
 - b. 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.
 - c. Reduce energy consumption through the implementation of an energy efficiency measure; provided, however, an electric public utility subject to the provisions of this subsection may meet up to twenty-five percent (25%) of the requirements of this section through savings due to implementation of energy efficiency measures. Beginning in calendar year 2021 and each year thereafter, an electric public utility may meet up to forty percent (40%) of the requirements of this section through savings due to implementation of energy efficiency measures.
 - d. Purchase electric power from a new renewable energy facility. Electric power purchased from a new renewable energy facility located outside the geographic boundaries of the State shall meet the requirements of this section if the electric power is delivered to a public utility that provides electric power to retail electric customers in the State; provided, however, the electric public utility shall not sell the renewable energy certificates created pursuant to this paragraph to another electric public utility.
 - e. Purchase renewable energy certificates derived from in-State or out-of-state new renewable energy facilities. Certificates derived from out-of-state new renewable energy facilities shall not be used to meet more than twenty-five percent (25%) of the requirements of this



section, provided that this limitation shall not apply to an electric public utility with less than 150,000 North Carolina retail jurisdictional customers as of December 31, 2006.

- f. Use electric power that is supplied by a new renewable energy facility or saved due to the implementation of an energy efficiency measure that exceeds the requirements of this section for any calendar year as a credit towards the requirements of this section in the following calendar year or sell the associated renewable energy certificates.
- Electricity demand reduction."

SECTION 3. G.S. 62-133.8(c) reads as rewritten:

Renewable Energy and Energy Efficiency Standards (REPS) for Electric "(c) Membership Corporations and Municipalities. -

Each electric membership corporation or municipality that sells electric (1)power to retail electric power customers in the State shall be subject to a Renewable Energy and Energy Efficiency Portfolio Standard (REPS) according to the following schedule:

Calendar Y	ear
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REPS Requirement

2012

3% of 2011 North Carolina retail sales

2015

6% of 2014 North Carolina retail sales

- 2018 and thereafter
- 10% of 2017 North Carolina retail sales
- An electric membership corporation or municipality may meet the (2)requirements of this section by any one or more of the following:
 - Generate electric power at a new renewable energy facility. a.
 - Reduce energy consumption through the implementation of b. demand-side management or energy efficiency measures.
 - c. Purchase electric power from a renewable energy facility or a hydroelectric power facility, provided that no more than thirty percent (30%) of the requirements of this section may be met with hydroelectric power, including allocations made by the Southeastern Power Administration.
 - Purchase renewable energy certificates derived from in-State or d. out-of-state renewable energy facilities. An electric power supplier subject to the requirements of this subsection may use certificates derived from out-of-state renewable energy facilities to meet no more than twenty-five percent (25%) of the requirements of this section.
 - Acquire all or part of its electric power through a wholesale purchase e. power agreement with a wholesale supplier of electric power whose portfolio of supply and demand options meets the requirements of this section.
 - f. Use electric power that is supplied by a new renewable energy facility or saved due to the implementation of demand-side management or energy efficiency measures that exceeds the requirements of this section for any calendar year as a credit towards the requirements of this section in the following calendar year or sell the associated renewable energy certificates.
 - Electricity demand reduction. <u>g.</u>

SECTION 4. This act is effective when it becomes law. In the General Assembly read three times and ratified this the 21st day of April,

2011.

s/ Walter H. Dalton President of the Senate

s/ Thom Tillis Speaker of the House of Representatives

s/ Beverly E. Perdue Governor

Approved 9:52 a.m. this 28th day of April, 2011

GENERAL ASSEMBLY OF NORTH CAROLINA SESSION 2011

SESSION LAW 2011-279 SENATE BILL 484

AN ACT TO PROVIDE THAT THE ADDITIONAL CREDITS ASSIGNED TO THE FIRST TEN MEGAWATTS OF BIOMASS RENEWABLE ENERGY FACILITY GENERATION CAPACITY PURSUANT TO S.L. 2010-195 (CLEANFIELDS ACT OF 2010) ARE ELIGIBLE TO SATISFY THE POULTRY WASTE SET-ASIDE.

The General Assembly of North Carolina enacts:

SECTION 1. Section 4 of S.L. 2010-195 reads as rewritten:

"SECTION 4. Renewable energy generation. – The definitions in G.S. 62-133.8 apply to this act. If the Utilities Commission determines that a biomass renewable energy facility located in the cleanfields renewable energy demonstration park is a new renewable energy facility, the Commission shall assign triple credit to any electric power or renewable energy certificates generated from renewable energy resources at the biomass renewable energy facility that are purchased by an electric power supplier for the purposes of compliance with G.S. 62-133.8. The additional credits <u>assigned to the first 10 megawatts of biomass renewable energy facility generation capacity</u> shall be eligible for use to meet the requirements of G.S. 62-133.8(f). The additional credits <u>assigned to the first 10 megawatts of biomass renewable energy facility generation capacity</u> shall first be used to satisfy the requirements of G.S. 62-133.8(f). Only when the requirements of G.S. 62-133.8(f) are met, shall the additional credits <u>assigned to the first 10 megawatts of biomass renewable energy facility generation capacity</u> shall first be used to satisfy the requirements of G.S. 62-133.8(f). Only when the requirements of G.S. 62-133.8(f) are met, shall the additional credits <u>assigned to the first 10 megawatts of biomass renewable energy facility generation capacity</u> be utilized to comply with G.S. 62-133.8(b) and (c). The triple credit shall apply only to the first 20 megawatts of biomass renewable energy facility generation capacity located in all cleanfields renewable energy demonstration parks in the State."

SECTION 2. This act is effective when it becomes law.

In the General Assembly read three times and ratified this the 18th day of June, 2011.

s/ Philip E. Berger President Pro Tempore of the Senate

s/ Thom Tillis Speaker of the House of Representatives

s/ Beverly E. Perdue Governor

Approved 5:22 p.m. this 23rd day of June, 2011



GENERAL ASSEMBLY OF NORTH CAROLINA SESSION 2011

SESSION LAW 2011-309 SENATE BILL 710

AN ACT TO ALLOW RENEWABLE ENERGY CERTIFICATES (RECS) DERIVED FROM THE THERMAL ENERGY OUTPUT OF COMBINED HEAT AND POWER FACILITIES THAT USE POULTRY WASTE AS A FUEL TO MEET THE REQUIREMENTS OF THE POULTRY WASTE SET-ASIDE.

The General Assembly of North Carolina enacts:

SECTION 1. Legislative Findings. – The General Assembly makes the following findings regarding the need to allow renewable energy certificates (RECs) derived from the thermal energy output of combined heat and power facilities that use poultry waste as a fuel to meet the requirements of the poultry waste set-aside under G.S. 62-133.8(f) (Compliance With REPS Requirements Through the Use of Poultry Waste Resources):

- (1) The electric power suppliers have experienced considerable difficulty in procuring sufficient electricity derived from the use of poultry waste at a reasonable cost to meet the especially restrictive language of the poultry waste set-aside.
- (2) The public interest of the State will be served by providing a cost-effective option for the electric power suppliers to use in order to comply with the poultry waste set-aside.
- (3) The State and the public will benefit directly from reduced process steam costs to North Carolina businesses, which will help North Carolina businesses remain competitive and viable.
- (4) The State and the public will benefit directly from diversifying the State's viable generation resource options, which utilize indigenous North Carolina resources to foster development of renewable projects in the State and encourage investment in new renewable projects.
- (5) The health and safety of the citizens of the State will be served through improving air quality and water quality through the controlled destruction of methane, the capture of organic residuals, and addressing the very important environmental concern involving the current disposal practice of land application of poultry waste, which poses an ever increasing threat of pollution and contamination of the waters of the State.

SECTION 2. G.S. 62-133.8(f) reads as rewritten:

"(f) Compliance With REPS Requirement Through Use of Poultry Waste Resources. – For calendar year 2014 and for each calendar year thereafter, at least 900,000 megawatt hours of the total electric power sold to retail electric customers in the State <u>or an equivalent amount</u> <u>of energy</u> shall be supplied, or contracted for supply in each year, by poultry waste combined with wood shavings, straw, rice hulls, or other bedding material. The electric power suppliers, in the aggregate, shall comply with the requirements of this subsection according to the following schedule:

Calendar Year

2012 2013 2014 Requirement for Poultry Waste Resources 170,000 megawatt hours 700,000 megawatt hours 900,000 megawatt hours"



SECTION 3. This act is effective when it becomes law. In the General Assembly read three times and ratified this the 18th day of June,

2011.

s/ Philip E. Berger President Pro Tempore of the Senate

s/ Thom Tillis Speaker of the House of Representatives

s/ Beverly E. Perdue Governor

Approved 10:45 a.m. this 27th day of June, 2011

GENERAL ASSEMBLY OF NORTH CAROLINA SESSION 2011

SESSION LAW 2011-394 HOUSE BILL 119

AN ACT TO AMEND CERTAIN ENVIRONMENTAL AND NATURAL RESOURCES LAWS TO (1) EXEMPT CERTAIN NEW RENEWABLE ENERGY FACILITIES FROM BEST AVAILABLE CONTROL TECHNOLOGY (BACT) REQUIREMENTS; (2) REDUCE CERTAIN OPEN BURNING SETBACK REQUIREMENTS AND PROVIDE THAT MINIMAL, UNINTENTIONAL NONCOMPLIANCE WITH AN OPEN BURNING SETBACK IS NOT A VIOLATION; (3) PROVIDE THAT DRAFT EROSION AND SEDIMENTATION CONTROL PLANS FOR THE CONSTRUCTION OF CERTAIN UTILITY LINES MAY BE SUBMITTED WITHOUT A LANDOWNER'S WRITTEN CONSENT; (4) CLARIFY THE PROHIBITION ON DISPOSAL IN LANDFILLS OR BY INCINERATION OF BEVERAGE CONTAINERS THAT ARE REQUIRED TO BE RECYCLED BY CERTAIN ABC PERMITTEES; (5) CLARIFY THE USE OF STATE FUNDS IN THE CONTEXT OF THE REMOVAL OF MERCURY-CONTAINING PRODUCTS FROM PUBLIC BUILDINGS; (6) DIRECT THE ENVIRONMENTAL MANAGEMENT COMMISSION TO DEVELOP MODEL STORMWATER CAPTURE AND REUSE PRACTICES; (7) PROHIBIT THE DIVISION OF WATER QUALITY OF THE DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES FROM REQUIRING A WATER QUALITY PERMIT FOR A TYPE I SOLID WASTE COMPOST FACILITY; (8) AMEND THE WATER-USE MAJOR FACILITY CONSTRUCTION STANDARD FOR PUBLIC AND REQUIRE THE RENOVATION PROJECTS TO INSTALLATION OF WEATHER-BASED IRRIGATION CONTROLLERS; (9) PROVIDE THAT NO PERMIT IS REQUIRED FOR THE CONSTRUCTION OR ALTERATION OF A SEWER SYSTEM OR TREATMENT WORKS THAT ALREADY HAS A DISCHARGE PERMIT; (10) EXEMPT SMALL DAMS AND AGRICULTURAL POND DAMS FROM THE DAM SAFETY ACT; (11) MAKE VARIOUS CHANGES TO THE LAWS GOVERNING THE STATE'S UNDERGROUND STORAGE TANK PROGRAM AND PETROLEUM DISCHARGES; (12) PROMOTE THE USE OF GRAY WATER; (13) CLARIFY THAT NUTRIENT OFFSET PAYMENTS SHALL REFLECT ACTUAL COSTS AS ADOPTED BY THE ENVIRONMENTAL MANAGEMENT COMMISSION; (14) DELAY IMPLEMENTATION OF CERTAIN JORDAN LAKE RULE **REQUIREMENTS**; (15) AUTHORIZE THE COMMISSION FOR PUBLIC HEALTH TO ADOPT RULES TO INCORPORATE THE FEDERAL FOOD CODE; (16) ESTABLISH A VARIANCE PROCESS FOR CERTAIN WATER SUPPLY WELL SETBACK REQUIREMENTS; (17) GRANDFATHER CERTAIN DEVELOPMENT UNDER THE NEUSE AND TAR-PAM RIVER BASIN BUFFER REQUIREMENTS; (18) PROVIDE THAT A GINSENG EXPORT CERTIFICATE MAY BE OBTAINED FREE OF CHARGE; (19) PROVIDE FOR AN EARLY SUNSET OF THE METHANE CAPTURE PILOT PROGRAM; (20) DIRECT THE DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES TO STUDY STORMWATER MANAGEMENT REQUIREMENTS FOR AIRPORTS IN THE STATE; (21) DIRECT CERTAIN TRANSFERS OF FUNDS FOR NONPOINT SOURCE POLLUTION CONTROL PROGRAMS; (22) CONFORM THE STATUTORY DEFINITION OF "SOLID WASTE" TO FEDERAL LAW; AND (23) TO AMEND CERTAIN FINANCIAL ASSURANCE REQUIREMENTS APPLICABLE TO HAZARDOUS WASTE FACILITIES.

The General Assembly of North Carolina enacts:

SECTION 1. G.S. 62-133.8(g) reads as rewritten:



"(g) Control of Emissions. - As used in this subsection, Best Available Control Technology (BACT) means an emissions limitation based on the maximum degree a reduction in the emission of air pollutants that is achievable for a facility, taking into account energy, environmental, and economic impacts and other costs. A biomass combustion process at any new renewable energy facility that delivers electric power to an electric power supplier shall meet BACT. The Environmental Management Commission shall determine on a case-by-case basis the BACT for a facility that would not otherwise be required to comply with BACT pursuant to the Prevention of Significant Deterioration (PSD) emissions program. The Environmental Management Commission may adopt rules to implement this subsection. In adopting rules, the Environmental Management Commission shall take into account cumulative and secondary impacts associated with the concentration of biomass facilities in close proximity to one another. In adopting rules the Environmental Management Commission shall provide for the manner in which a facility that would not otherwise be required to comply with BACT pursuant to the PSD emissions programs shall meet the BACT requirement. This subsection shall not apply to a facility that qualifies as a new renewable energy facility under sub-subdivision b. of subdivision (5) of subsection (a) of this section."

SECTION 2.(a) Definitions. – The definitions set out in G.S. 143-212, G.S. 143-213, and 15A NCAC 02D .1902 (Definitions) apply to this section and its implementation.

SECTION 2.(b) 15A NCAC 02D .1903 (Open Burning Without An Air Quality Permit). – Until the effective date of the revised permanent rule that the Commission is required to adopt pursuant to Section 2(d) of this act, the Commission, the Department, and any other political subdivision of the State that implements 15A NCAC 02D .1903 (Open Burning Without An Air Quality Permit) shall implement the rule, as provided in Section 2(c) of this act.

SECTION 2.(c) Implementation. – Notwithstanding sub-subdivision (B) subdivision (2) of subsection (b) of 15A NCAC 02D .1903 (Open Burning Without An Air Quality Permit), open burning for land clearing or right-of-way maintenance is permissible without an air quality permit if the location of the burning is at least 500 feet from any dwelling, group of dwellings, or commercial or institutional establishment, or other occupied structure not located on the property on which the burning is conducted. The regional office supervisor may grant exceptions to the setback requirements if either of the following conditions is met:

- (1) A signed, written statement waiving objections to the open burning associated with the land clearing operation is obtained and submitted to, and the exception granted by, the regional office supervisor before the burning begins from a resident or an owner of each dwelling, commercial or institutional establishment, or other occupied structure within 500 feet of the open burning site. In the case of a lease or rental agreement, the lessee or renter shall be the person from whom permission shall be gained prior to any burning.
- (2) An air curtain burner that complies with 15A NCAC 02D .1904 (Air Curtain Burners), as provided in this section, is utilized at the open burning site.

Factors that the regional supervisor shall consider in deciding to grant the exception include all the persons who need to sign the statement waiving the objection have signed it, the location of the burn, and the type, amount, and nature of the combustible substances. The regional supervisor shall not grant a waiver if a college, school, licensed day care, hospital, licensed rest home, or other similar institution is less than 500 feet from the proposed burn site when such institution is occupied.

SECTION 2.(d) Additional Rule-Making Authority. – The Commission shall adopt a rule to amend 15A NCAC 02D .1903 (Open Burning Without An Air Quality Permit). Notwithstanding G.S. 150B-19(4), the rule adopted by the Commission pursuant to this section shall be substantively identical to the provisions of Section 2(c) of this act. Rules adopted pursuant to this section are not subject to the publication of notice of text or public hearing requirements of G.S. 150B-21.2. Rules adopted pursuant to this section are not subject to G.S. 150B-21.9 through G.S. 150B-21.14. Rules adopted pursuant to this section shall become effective as provided in G.S. 150B-21.3(b1) as though 10 or more written objections had been received as provided by G.S. 150B-21.3(b2).

SECTION 2.(e) 15A NCAC 02D .1904 (Air Curtain Burners). – Until the effective date of the revised permanent rule that the Commission is required to adopt pursuant to Section 2(g) of this act, the Commission, the Department, and any other political subdivision of the State that implements 15A NCAC 02D .1904 (Air Curtain Burners) shall implement the rule, as provided in Section 2(f) of this act.

SECTION 2.(f) Implementation. – Notwithstanding subdivision (12) of subsection (b) of 15A NCAC 02D .1904 (Air Curtain Burners), the location of the air curtain burning shall be at least 300 feet from any dwelling, group of dwellings, or commercial or institutional establishment, or other occupied structure not located on the property on which the burning is conducted. The regional office supervisor may grant exceptions to the setback requirements if a signed, written statement waiving objections to the air curtain burning is obtained from a resident or an owner of each dwelling, commercial or institutional establishment, or other occupied structure within 300 feet of the burning site. In case of a lease or rental agreement, the lessee or renter, and the property owner shall sign the statement waiving objections to the supervisor shall consider in deciding to grant the exception include all the persons who need to sign the statement waiving the objection have signed it; the location of the burn; and the type, amount, and nature of the combustible substances.

SECTION 2.(g) Additional Rule-Making Authority. – The Commission shall adopt a rule to amend 15A NCAC 02D .1904 (Air Curtain Burners). Notwithstanding G.S. 150B-19(4), the rule adopted by the Commission pursuant to this section shall be substantively identical to the provisions of Section 2(f) of this act. Rules adopted pursuant to this section are not subject to the publication of notice of text or public hearing requirements of G.S. 150B-21.2. Rules adopted pursuant to this section are not subject to G.S. 150B-21.9 through G.S. 150B-21.14. Rules adopted pursuant to this section shall become effective as provided in G.S. 150B-21.3(b1) as though 10 or more written objections had been received as provided by G.S. 150B-21.3(b2).

SECTION 2.(h) G.S. 113-60.29 reads as rewritten:

"§ 113-60.29. Penalties.

Any person violating the provisions of this Article or of any permit issued under the authority of this Article shall be guilty of a Class 3 misdemeanor. It is not a violation of this Article or any permit issued under the authority of this Article if a person unintentionally fails to comply with a setback requirement so long as the difference between the required setback and the actual setback is no more than five percent (5%) of the required setback. The penalties imposed by this section shall be separate and apart and not in lieu of any civil or criminal penalties which may be imposed by G.S. 143-215.114A or G.S. 143-215.114B. The penalties imposed are also in addition to any liability the violator incurs as a result of actions taken by the Department under G.S. 113-60.28."

SECTION 3. G.S. 113A-54.1 reads as rewritten:

"§ 113A-54.1. Approval of erosion control plans.

A draft erosion and sedimentation control plan must contain the applicant's address (a) and, if the applicant is not a resident of North Carolina, designate a North Carolina agent for the purpose of receiving notice from the Commission or the Secretary of compliance or noncompliance with the plan, this Article, or any rules adopted pursuant to this Article. If Except as provided in subsection (a1) of this section, if the applicant is not the owner of the land to be disturbed, the draft erosion and sedimentation control plan must include the owner's written consent for the applicant to submit a draft erosion and sedimentation control plan and to conduct the anticipated land-disturbing activity. The Commission shall approve, approve with modifications, or disapprove a draft erosion and sedimentation control plan for those land-disturbing activities for which prior plan approval is required within 30 days of receipt. The Commission shall condition approval of a draft erosion and sedimentation control plan upon the applicant's compliance with federal and State water quality laws, regulations, and rules. Failure to approve, approve with modifications, or disapprove a completed draft erosion and sedimentation control plan within 30 days of receipt shall be deemed approval of the plan. If the Commission disapproves a draft erosion and sedimentation control plan or a revised erosion and sedimentation control plan, it must state in writing the specific reasons that the plan was disapproved. Failure to approve, approve with modifications, or disapprove a revised erosion and sedimentation control plan within 15 days of receipt shall be deemed approval of

the plan. The Commission may establish an expiration date for erosion and sedimentation control plans approved under this Article.

(a1) If the applicant is not the owner of the land to be disturbed and the anticipated land-disturbing activity involves the construction of utility lines for the provision of water, sewer, gas, telecommunications, or electrical service, the draft erosion and sedimentation control plan may be submitted without the written consent of the owner of the land, so long as the owner of the land has been provided prior notice of the project.

SECTION 4. G.S. 130A-309.10 reads as rewritten:

(f) No person shall knowingly dispose of the following solid wastes in landfills:

- (1) Repealed by Session Laws 1991, c. 375, s. 1.
- (2) Used oil.

"

- (3) Yard trash, except in landfills approved for the disposal of yard trash under rules adopted by the Commission. Yard trash that is source separated from solid waste may be accepted at a solid waste disposal area where the area provides and maintains separate yard trash composting facilities.
- (4) White goods.
- (5) Antifreeze (ethylene glycol).
- (6) Aluminum cans.
- (7) Whole scrap tires, as provided in G.S. 130A-309.58(b). The prohibition on disposal of whole scrap tires in landfills applies to all whole pneumatic rubber coverings, but does not apply to whole solid rubber coverings.
- (8) Lead-acid batteries, as provided in G.S. 130A-309.70.
- (9) Beverage containers that are required to be recycled under G.S. 18B-1006.1.
- (10) Motor vehicle oil filters.
- (11) Recyclable rigid plastic containers that are required to be labeled as provided in subsection (e) of this section, that have a neck smaller than the body of the container, and that accept a screw top, snap cap, or other closure. The prohibition on disposal of recyclable rigid plastic containers in landfills does not apply to rigid plastic containers that are intended for use in the sale or distribution of motor oil or pesticides.
- (12) Wooden pallets, except that wooden pallets may be disposed of in a landfill that is permitted to only accept construction and demolition debris.
- (13) Oyster shells.
- (14) (Éffective July 1, 2011) Discarded computer equipment, as defined in G.S. 130A-309.131.
- (15) (Effective July 1, 2011) Discarded televisions, as defined in G.S. 130A-309.131.

(f1) No person shall knowingly dispose of the following solid wastes by incineration in an incinerator for which a permit is required under this Article:

- (1) Antifreeze (ethylene glycol) used solely in motor vehicles.
- (2) Aluminum cans.
- (3) Repealed by Session Laws 1995 (Regular Session, 1996), c. 594, s. 17.
- (4) White goods.
- (5) Lead-acid batteries, as provided in G.S. 130A-309.70.
- (6) Beverage containers that are required to be recycled under G.S. 18B-1006.1.
- (7) (Effective July 1, 2011) Discarded computer equipment, as defined in G.S. 130A-309.131.
- (8) (Effective July 1, 2011) Discarded televisions, as defined in G.S. 130A-309.131.

(f2) <u>Subsection Subsections (f1) and (f3)</u> of this section shall not apply to solid waste incinerated in an incinerator solely owned and operated by the generator of the solid waste. Subsection (f1) of this section shall not apply to antifreeze (ethylene glycol) that cannot be recycled or reclaimed to make it usable as antifreeze in a motor vehicle.

(f3) Holders of on-premises malt beverage permits, on-premises unfortified wine permits, on-premises fortified wine permits, and mixed beverages permits shall not knowingly dispose of beverage containers that are required to be recycled under G.S. 18B-1006.1 in landfills or by incineration in an incinerator for which a permit is required under this Article. (g) Repealed by Session Laws 1995 (Regular Session, 1996), c. 594, s. 17.

(h) The accidental or occasional disposal of small amounts of prohibited solid waste by landfill shall not be construed as a violation of subsection subsection (f) or (f3) of this section.

(i) The accidental or occasional disposal of small amounts of prohibited solid waste by incineration shall not be construed as a violation of subsection subsection (f1) or (f3) of this section if the Department has approved a plan for the incinerator as provided in subsection (j) of this section or if the incinerator is exempt from subsection (j) of this section.

The Department may issue a permit pursuant to this Article for an incinerator that is (1)subject to subsection (f1) of this section only if the applicant for the permit has a plan approved by the Department pursuant to this subsection. The applicant shall file the plan at the time of the application for the permit. The Department shall approve a plan only if it complies with the requirements of this subsection. The plan shall provide for the implementation of a program to prevent the incineration of the solid waste listed in subsection subsections (f1) and (f3) of this section. The program shall include the random visual inspection prior to incineration of at least ten percent (10%) of the solid waste to be incinerated. The program shall also provide for the retention of the records of the random visual inspections and the training of personnel to recognize the solid waste listed in subsection subsections (f1) and (f3) of this section. If a random visual inspection discovers solid waste that may not be incinerated pursuant to subsection subsections (f1) and (f3) of this section, the program shall provide that the operator of the incinerator shall dispose of the solid waste in accordance with applicable federal and State laws, regulations, and rules. This subsection does not apply to an incinerator that disposes only of medical waste.

(k) A county or city may petition the Department for a waiver from the prohibition on disposal of a material described in subdivisions (9), (10), (11) and (12) of subsection (f) of this section <u>and subsection (f3) of this section</u> in a landfill based on a showing that prohibiting the disposal of the material would constitute an economic hardship.

(1) Oyster shells that are delivered to a landfill shall be stored at the landfill for at least 90 days or until they are removed for recycling. If oyster shells that are stored at a landfill are not removed for recycling within 90 days of delivery to the landfill, then, notwithstanding subdivision (13) of subsection (f) of this section, the oyster shells may be disposed of in the landfill.

(m) (Effective July 1, 2011) No person shall knowingly dispose of fluorescent lights and thermostats that contain mercury in a sanitary landfill for the disposal of construction and demolition debris waste that is unlined or in any other landfill that is unlined."

SECTION 5. G.S. 130A-310.60 reads as rewritten:

"§ 130A-310.60. (Effective July 1, 2011) Recycling required by public agencies.

(a) Each State agency, including the General Assembly, the General Court of Justice, universities, community colleges, public schools, and political subdivisions using State funds for the construction or operation of public buildings shall establish a program in cooperation with the Department of Environment and Natural Resources and the Department of Administration for the collection and recycling of all spent fluorescent lights and thermostats that contain mercury generated in public buildings owned by each respective entity. The program shall include procedures for convenient collection, safe storage, and proper recycling of spent fluorescent lights and thermostats that contain mercury and contractual or other arrangements with buyers of the recyclable materials.

(b) Each State agency, including the General Assembly, the General Court of Justice, universities, community colleges, the Department of Public Instruction on behalf of the public schools, and political subdivisions shall submit a report on or before December 1, 2011, that documents the entity's compliance with the requirements of subsection (a) of this section to the Department of Environment and Natural Resources and the Department of Administration. The Departments shall compile the information submitted and jointly shall submit a report to the Environmental Review Commission on or before January 15, 2012, concerning the activities required by subsection (a) of this section. The information provided shall also be included in the report required by G.S. 130A-309.06(c).

(c) For purposes of this section, a political subdivision is using State funds when it receives grant funding from the State for the construction or operation of a public building."

SECTION 6. G.S. 143-214.7 reads as rewritten:

"§ 143-214.7. Stormwater runoff rules and programs.

(a) Policy, Purpose and Intent. – The Commission shall undertake a continuing planning process to develop and adopt a statewide plan with regard to establishing and enforcing stormwater rules for the purpose of protecting the surface waters of the State. It is the purpose and intent of this section that, in developing stormwater runoff rules and programs, the Commission may utilize stormwater rules established by the Commission to protect classified shellfish waters, water supply watersheds, and outstanding resource waters; and to control stormwater runoff disposal in coastal counties and other nonpoint sources. Further, it is the intent of this section that the Commission phase in the stormwater rules on a priority basis for all sources of pollution to the water. The plan shall be applied evenhandedly throughout the State to address the State's water quality needs. The Commission shall continually monitor water quality in the State and shall revise stormwater runoff rules as necessary to protect water quality. As necessary, the stormwater rules shall be modified to comply with federal regulations.

(b) The Commission shall implement stormwater runoff rules and programs for point and nonpoint sources on a phased-in statewide basis. The Commission shall consider standards and best management practices for the protection of the State's water resources in the following order of priority:

- (1) Classified shellfish waters.
- (2) Water supply watersheds.
- (3) Outstanding resource waters.
- (4) High quality waters.
- (5) All other waters of the State to the extent that the Commission finds control of stormwater is needed to meet the purposes of this Article.

(b1) The Commission shall develop model practices for incorporation of stormwater capture and reuse into stormwater management programs and shall make information on those model practices available to State agencies and local governments.

(c) The Commission shall develop model stormwater management programs that may be implemented by State agencies and units of local government. Model stormwater management programs shall be developed to protect existing water uses and assure compliance with water quality standards and classifications. A State agency or unit of local government may submit to the Commission for its approval a stormwater control program for implementation within its jurisdiction. To this end, State agencies may adopt rules, and units of local government are authorized to adopt ordinances and regulations necessary to establish and enforce stormwater control programs. Units of local government are authorized to create or designate agencies or subdivisions to administer and enforce the programs. Two or more units of local government are authorized to establish a joint program and to enter into any agreements that are necessary for the proper administration and enforcement of the program.

Any land-use restriction providing for the maintenance of stormwater best (c1)management practices or site consistency with approved stormwater project plans filed pursuant to a rule of the Commission, local ordinance, or permit approved by the Commission shall be enforced by any owner of the land on which the best management practice or project is located, any adjacent property owners, any downstream property owners who would be injured by failure to enforce the land-use restriction, any local government having jurisdiction over any part of the land on which the best management practice or project is located, or the Department through the remedies provided by any provision of law that is implemented or enforced by the Department or by means of a civil action, without first having exhausted any available administrative remedies. A land-use restriction providing for the maintenance of stormwater best management practices or site consistency with approved stormwater project plans filed pursuant to a rule of the Commission, local ordinance, or permit approved by the Commission shall not be declared unenforceable due to lack of privity of estate or contract, due to lack of benefit to particular land, or due to lack of any property interest in particular land. Any person who owns or leases a property subject to a land-use restriction under this section shall abide by the land-use restriction.

(d) The Commission shall review each stormwater management program submitted by a State agency or unit of local government and shall notify the State agency or unit of local government that submitted the program that the program has been approved, approved with modifications, or disapproved. The Commission shall approve a program only if it finds that the standards of the program equal or exceed those of the model program adopted by the Commission pursuant to this section. (d1) A retail merchant shall not use more than 400 square feet of impervious surface area within the portion of the merchant's premises that is designed to be used for vehicular parking for the display and sale of nursery stock, as that term is defined by the Board of Agriculture pursuant to G.S. 106-423. This subsection shall not apply to a retail merchant that either:

- (1) Collects and treats stormwater on-site using a treatment system that is designed to remove at least eighty-five percent (85%) of total suspended solids. For purposes of this subdivision, a treatment system includes, but is not limited to, a filtration system or a detention system.
- (2) Collects and stores stormwater for reuse on-site for irrigation or other purposes.
- (3) Collects and discharges stormwater to a local or regional stormwater collection and treatment system.

(d2) Repealed by Session Laws 2008-198, s. 8(a), effective August 8, 2008.

(e) The Commission shall annually report to the Environmental Review Commission on the implementation of this section, including the status of any stormwater control programs administered by State agencies and units of local government, on or before 1 October of each year."

SECTION 7. G.S. 143-214.7A(b) reads as rewritten:

"(b) The Division of Water Quality shall clarify that stormwater is water that does not contact anything considered a feedstock, intermediate product, or final product of composting operations. The Division of Water Quality shall clarify that wastewater is leachate and water that contacts feedstocks, intermediate products, or final product, of composting operations. The clarifications shall incorporate available scientifically valid information obtained from sampling and analyses of North Carolina composting facilities and from valid representative data from other states. In addition, the Division of Water Quality shall establish threshold quantities of feedstocks, intermediate products, and final products above which water quality permitting will be required. The Division of Water Quality shall not require water quality permitting for any Type I solid waste compost facility, unless required to do so by federal law."

SECTION 8.(a) G.S. 143-135.36 is amended by adding a new subdivision to read: "§ 143-135.36. Definitions.

As used in this section, the following definitions apply unless the context requires otherwise:

- (1) "ASHRAE" means the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.
- (2) "Commission" means to document and to verify throughout the construction process whether the performance of a building, a component of a building, a system of a building, or a component of a building system meets specified objectives, criteria, and agency project requirements.
- (3) "Department" means the Department of Administration.
- (4) "Institutions of higher education" means the constituent institutions of The University of North Carolina, the regional institutions as defined in G.S. 115D-2, and the community colleges as defined in G.S. 115D-2.
- (5) "Major facility construction project" means a project to construct a building larger than 20,000 gross square feet of occupied or conditioned space, as defined in the North Carolina State Building Code adopted under Article 9 of Chapter 143 of the General Statutes. "Major facility construction project" does not include a project to construct a transmitter building or a pumping station.
- (6) "Major facility renovation project" means a project to renovate a building when the cost of the project is greater than fifty percent (50%) of the insurance value of the building prior to the renovation and the renovated portion of the building is larger than 20,000 gross square feet of occupied or conditioned space, as defined in the North Carolina State Building Code. "Major facility renovation project" does not include a project to renovate a transmitter building or a pumping station. "Major facility renovation project" does not include a project to renovate a building having historic, architectural, or cultural significance under Part 4 of Article 2 of Chapter 143B of the General Statutes.

- (7) "Public agency" means every State office, officer, board, department, and commission and institutions of higher education.
- (8) "Weather-based irrigation controller" means an irrigation control device that utilizes local weather and landscape conditions to tailor irrigation system schedules to irrigation needs specific to site conditions."

SECTION 8.(b) G.S. 143-135.37 reads as rewritten:

"§ 143-135.37. Energy and water use standards for public major facility construction and renovation projects; verification and reporting of energy and water use.

(a) Program Established. – The Sustainable Energy-Efficient Buildings Program is established within the Department to be administered by the Department. This program applies to any major facility construction or renovation project of a public agency that is funded in whole or in part from an appropriation in the State capital budget or through a financing contract as defined in G.S. 142-82.

(b) Energy-Efficiency Standard. – For every major facility construction project of a public agency, the building shall be designed and constructed so that the calculated energy consumption is at least thirty percent (30%) less than the energy consumption for the same building as calculated using the energy-efficiency standard in ASHRAE 90.1-2004. For every major facility renovation project of a public agency, the renovated building shall be designed and constructed so that the calculated energy consumption is at least twenty percent (20%) less than the energy consumption for the same renovated building as calculated using the energy-efficiency standard in ASHRAE 90.1-2004. For the purposes of this subsection, any exception or special standard for a specific type of building found in ASHRAE 90.1-2004 is included in the ASHRAE 90.1-2004 standard.

(c) <u>Indoor Potable</u> Water Use Standard. – For every major facility construction or renovation project of a public agency, the water system shall be designed and constructed so that the calculated indoor potable water use is at least twenty percent (20%) less than the indoor potable water use for the same building as calculated using the fixture performance requirements related to plumbing under the 2006 North Carolina State Building Code.

(c1) Outdoor Potable Water Use Standard. – For every major facility construction project of a public agency, the water system shall be designed and constructed so that the calculated sum of the outdoor potable water use and the harvested stormwater use is at least fifty percent (50%) less than the sum of the outdoor potable water use and the harvested stormwater use for the same building as calculated using the performance requirements related to plumbing under the 2006 North Carolina State Building Code. Weather-based irrigation controllers shall be used for irrigation systems for major facility construction projects. For every major facility renovation project of a public agency, the Department shall determine on a project-by-project basis what reduced level of outdoor potable use or harvested stormwater use, if any, is a feasible requirement for the project, project. but the The Department shall not require a greater reduction than is required under this subsection for a major facility construction project. To reduce the potable outdoor water as required under this subsection, weather-based irrigation controllers, landscape materials that are water use efficient efficient, and irrigation strategies that include reuse and recycling of the water may be used."

SECTION 9. G.S. 143-215.1 reads as rewritten:

"§ 143-215.1. Control of sources of water pollution; permits required.

(a) Activities for Which Permits Required. – No-Except as provided in subsection (a5) of this section, no person shall do any of the following things or carry out any of the following activities unless that person has received a permit from the Commission and has complied with all conditions set forth in the permit:

- (1) Make any outlets into the waters of the State.
- (2) Construct or operate any sewer system, treatment works, or disposal system within the State.
- (3) Alter, extend, or change the construction or method of operation of any sewer system, treatment works, or disposal system within the State.
- (4) Increase the quantity of waste discharged through any outlet or processed in any treatment works or disposal system to any extent that would result in any violation of the effluent standards or limitations established for any point source or that would adversely affect the condition of the receiving waters to the extent of violating any applicable standard.

- (5) Change the nature of the waste discharged through any disposal system in any way that would exceed the effluent standards or limitations established for any point source or that would adversely affect the condition of the receiving waters in relation to any applicable standards.
- (6) Cause or permit any waste, directly or indirectly, to be discharged to or in any manner intermixed with the waters of the State in violation of the water quality standards applicable to the assigned classifications or in violation of any effluent standards or limitations established for any point source, unless allowed as a condition of any permit, special order or other appropriate instrument issued or entered into by the Commission under the provisions of this Article.
- (7) Cause or permit any wastes for which pretreatment is required by pretreatment standards to be discharged, directly or indirectly, from a pretreatment facility to any disposal system or to alter, extend or change the construction or method of operation or increase the quantity or change the nature of the waste discharged from or processed in that facility.
- (8) Enter into a contract for the construction and installation of any outlet, sewer system, treatment works, pretreatment facility or disposal system or for the alteration or extension of any such facility.
- (9) Dispose of sludge resulting from the operation of a treatment works, including the removal of in-place sewage sludge from one location and its deposit at another location, consistent with the requirement of the Resource Conservation and Recovery Act and regulations promulgated pursuant thereto.
- (10) Cause or permit any pollutant to enter into a defined managed area of the State's waters for the maintenance or production of harvestable freshwater, estuarine, or marine plants or animals.
- (11) Cause or permit discharges regulated under G.S. 143-214.7 that result in water pollution.
- (12) Construct or operate an animal waste management system, as defined in G.S. 143-215.10B, without obtaining a permit under either this Part or Part 1A of this Article.

(a1) In the event that both effluent standards or limitations and classifications and water quality standards are applicable to any point source or sources and to the waters to which they discharge, the more stringent among the standards established by the Commission shall be applicable and controlling.

(a2) No permit shall be granted for the disposal of waste in waters classified as sources of public water supply where the head of the agency that administers the public water supply program pursuant to Article 10 of Chapter 130A of the General Statutes, after review of the plans and specifications for the proposed disposal facility, determines and advises the Commission that any outlet for the disposal of waste is, or would be, sufficiently close to the intake works or proposed intake works of a public water supply as to have an adverse effect on the public health.

(a3) If the Commission denies an application for a permit, the Commission shall state in writing the reason for the denial and shall also state the Commission's estimate of the changes in the applicant's proposed activities or plans that would be required in order that the applicant may obtain a permit.

(a4) The Department shall regulate wastewater systems under rules adopted by the Commission for Public Health pursuant to Article 11 of Chapter 130A of the General Statutes except as otherwise provided in this subsection. No permit shall be required under this section for a wastewater system regulated under Article 11 of Chapter 130A of the General Statutes. The following wastewater systems shall be regulated by the Department under rules adopted by the Commission:

- (1) Wastewater systems designed to discharge effluent to the land surface or surface waters.
- (2) Wastewater systems designed for groundwater remediation, groundwater injection, or landfill leachate collection and disposal.
- (3) Wastewater systems designed for the complete recycle or reuse of industrial process wastewater.

(a5) No permit shall be required to enter into a contract for the construction, installation, or alteration of any treatment works or disposal system or to construct, install, or alter any treatment works or disposal system within the State when the system's or work's principle function is to conduct, treat, equalize, neutralize, stabilize, recycle, or dispose of industrial waste or sewage from an industrial facility and the discharge of the industrial waste or sewage is authorized under a permit issued for the discharge of the industrial waste or sewage into the waters of the State. Notwithstanding the above, the permit issued for the discharge may be modified if required by federal regulation.

SECTION 10.(a) G.S. 143-215.25A(a) reads as rewritten:

- "(a) Except as otherwise provided in this Part, this Part does not apply to any dam:
 - (1) Constructed by the United States Army Corps of Engineers, the Tennessee Valley Authority, or another agency of the United States government, when the agency designed or approved plans for the dam and supervised its construction.
 - (2) Constructed with financial assistance from the United States Soil Conservation Service, when that agency designed or approved plans for the dam and supervised its construction.
 - (3) Licensed by the Federal Energy Regulatory Commission, or for which a license application is pending with the Federal Energy Regulatory Commission.
 - (4) For use in connection with electric generating facilities regulated by the Nuclear Regulatory Commission.
 - (5) Under a single private ownership that provides protection only to land or other property under the same ownership and that does not pose a threat to human life or property below the dam.
 - (6) That is less than $\frac{15}{25}$ feet in height or that has an impoundment capacity of less than $\frac{10}{50}$ acre-feet, unless the Department determines that failure of the dam could result in loss of human life or significant damage to property below the dam.
 - (7) Constructed for the purpose of providing water for agricultural use, when a person who is licensed as a professional engineer under Chapter 89C of the General Statutes designed or approved plans for the dam, supervised its construction, and registered the dam with the Division of Land Resources of the Department. This exemption shall not apply to dams that are determined to be high-hazard by the Department."

SECTION 10.(b) The exemption modified in subdivision (6) of G.S. 143-215.25A(a) and the exemption established in subdivision (7) of G.S. 143-215.25A(a), as amended by Section 10(a) of this act, shall apply retroactively to any dam that is subject to any enforcement action that has not been resolved as of June 1, 2011.

SECTION 10.(c) If Sections 10(a) and 10(b) of this act become law, and Senate Bill 492, 2011 Regular Session, becomes law, then Section 4 of Senate Bill 492 is repealed.

SECTION 11.1. G.S. 143-215.94B(b) reads as rewritten:

"(b) The Commercial Fund shall be used for the payment of the following costs up to an aggregate maximum of one million dollars (\$1,000,000) per occurrence resulting from a discharge or release of a petroleum product from a commercial underground storage tank:

(8) The costs of a site investigation required by the Department for the purpose of determining whether a release from a tank system has occurred, whether or not the investigation confirms that a release has occurred. This subdivision shall not be construed to allow reimbursement for costs of investigations that are part of routine leak detection procedures required by statute or rule."

SECTION 11.2. G.S. 143-215.94B(b1) reads as rewritten:

"(b1) In the event that two or more discharges or releases at any one facility, the first of which was discovered or reported on or after 30 June 1988, result in more than one plume of soil, surface water, or groundwater contamination, the Commercial Fund shall be used for the payment of the costs of the cleanup of environmental damage as required by G.S. 143-215.94E(a) in excess of the multiple discharge amount up to the applicable aggregate

...."

maximum specified in subsections (b) and (b2) of this section. The multiple discharge amount shall be calculated as follows:

- (1) Each discharge or release shall be considered separately as if it were the only discharge or release, and the cost for which the owner or operator is responsible under subdivisions (1), (2), (2a), or (3) of subsection (b) of this section, whichever are applicable, shall be determined for each discharge or release. For each discharge or release for which subdivision (4) of subsection (b) of this section is applicable, the cost for which the owner or operator is responsible, for the purpose of this subsection, shall be seventy-five thousand dollars (\$75,000). For purposes of this subsection, two or more discharges or releases that result in a single plume of soil, surface water, or groundwater contamination shall be considered as a single discharge or release.
- (2) The multiple discharge amount shall be the lesser of:
 - a. The sum of all the costs determined as set out in subdivision (1) of this subsection; or
 - b. The product of the highest of the costs determined as set out in subdivision (1) of this subsection multiplied by one and one-half $(1\frac{1}{2})$.
- (3) If an owner or operator elects to cleanup a separate discharge or release for which the owner or operator is not responsible, the responsible party for the other discharge cannot be identified, and the discharges are commingled, the owner or operator shall only be responsible for those costs applicable to the discharge for which the owner or operator is actually the responsible party."

SECTION 11.3.(a) G.S. 143-215.94B is amended by adding a new subsection to

read:

"(i) During each fiscal year, the Department shall use up to one million dollars (\$1,000,000) of the funds in the Commercial Fund to fund necessary assessment and cleanup to be conducted by the Department of discharges or releases for which a responsible party has been identified but for which the responsible party can demonstrate that undertaking the costs of assessment and cleanup will impose a severe financial hardship. Any portion of the \$1,000,000 designated each fiscal year, which is not used during that fiscal year to address situations of severe financial hardship, shall revert to the Commercial Fund for the uses otherwise provided by this section. The Commission shall adopt rules to define severe financial hardship; establish criteria for assistance due to severe financial hardship pursuant to this section; and establish a process for evaluation and determinations of eligibility with respect to applications for assistance due to severe financial hardship. The Commission shall create a subcommittee of the Commission's Committee on Civil Penalty Remissions as established by G.S. 143B-282.1 to render determinations of eligibility under this subsection."

SECTION 11.3.(b) G.S. 143-215.94D is amended by adding a new subsection to read:

"(h) During each fiscal year, the Department shall use up to one hundred thousand (\$100,000) of the funds in the Noncommercial Fund to fund necessary assessment and cleanup to be conducted by the Department of discharges or releases for which a responsible party has been identified but for which the responsible party can demonstrate that undertaking the costs of assessment and cleanup will impose a severe financial hardship. Any portion of the \$100,000 designated each fiscal year, which is not used during that fiscal year to address situations of severe financial hardship, shall revert to the Noncommercial Fund for the uses otherwise provided by this section. The Commission shall adopt rules to define severe financial hardship; establish criteria for assistance due to severe financial hardship pursuant to this section; and establish a process for evaluation and determinations of eligibility with respect to applications for assistance due to severe financial hardship. The Commission shall create a subcommittee of the Commission's Committee on Civil Penalty Remissions as established by G.S. 143B-282.1 to render determinations of eligibility under this subsection."

SECTION 11.3.(c) G.S. 143-215.94C reads as rewritten:

"§ 143-215.94C. Commercial leaking petroleum underground storage tank cleanup fees.

(b) The annual operating fee shall be determined on a calendar year basis. For petroleum commercial underground storage tanks in use on 1 January and remaining in use on

or after 1 December of that year, the annual operating fee due for that year shall be as specified in subsection (a) of this section. For a petroleum commercial underground storage tank that is first placed in service in any year, the annual operating fee due for that year shall be determined by multiplying one-twelfth (1/12) of the amount specified in subsection (a) of this section by the number of months remaining in the calendar year. For a petroleum commercial underground storage tank that is permanently removed from service in any year, the annual operating fee due for that year shall be determined by multiplying one-twelfth (1/12) of the amount specified in subsection (a) of this section by the number of months in the calendar year preceding the permanent removal from use. In calculating the pro rata annual operating fee for a tank that is first placed in use or permanently removed during a calendar year under the preceding two sentences, a partial month shall count as a month, except that where a tank is permanently removed and replaced by another tank, the total of the annual operating fee for the tank that is removed and the replacement tank shall not exceed the annual operating fee for the replacement tank. The Except as provided in this subsection, the annual operating fee shall be due and payable on the first day of the month in accordance with a staggered schedule established by the Department. The Department shall implement a staggered schedule to the end that the total amount of fees to be collected by the Department is approximately the same each quarter. A person who owns or operates more than one petroleum commercial underground storage tank may request that the fee for all tanks be due at the same time. The fee for all commercial underground storage tanks located at the same facility shall be due at the same time. A person who owns or operates 12 or more commercial petroleum storage tanks may request that the total of all fees be paid in four equal payments to be due on the first day of each calendar quarter. quarter, provided that the fee for all commercial underground storage tanks located at the same facility shall be due at the same time."

SECTION 11.4. G.S. 143-215.94T reads as rewritten: "§ 143-215.94T. Adoption and implementation of regulatory program.

(c) Rules adopted pursuant to subdivision (13) of subsection (a) of this section shall require secondary containment for all components of underground storage tank systems, including, but not limited to, tanks, piping, fittings, pump heads, and dispensers. Secondary containment requirements shall include standards for double wall tanks, piping, and fittings and for sump containment for pump heads and dispensers. The rules shall provide for monitoring of double wall interstices and sump containments. The rules shall apply to any underground storage tank system that is installed on or after the date on which the rules become effective and to the replacement of any component of an underground storage tank system on or after that date. This section shall not be construed to limit the right of an owner or operator to repair any existing component of an underground storage tank system. If an existing underground storage tank is replaced, the secondary containment and interstitial monitoring requirements shall apply only to the replaced underground tank. Likewise, if existing piping is replaced, the secondary containment and interstitial monitoring requirements shall apply only to the replaced underground tank. Likewise, if existing piping is replaced, the secondary containment and interstitial monitoring requirements shall apply only to the replaced underground tank.

(d) The Department shall allow non-tank metallic components that are unprotected from corrosion, including flex connectors and other metal fittings and connectors at the ends of piping runs, to have corrosion protection added as an alternative to replacement of these components if the component does not have visible corrosion and passes a tightness test."

SECTION 11.5. G.S. 143-215.94V(b) reads as rewritten:

"(b) The Commission shall adopt rules to establish a risk-based approach for the assessment, prioritization, and cleanup of discharges and releases from petroleum underground storage tanks. The rules shall address, at a minimum, the circumstances where site-specific information should be considered, criteria for determining acceptable cleanup levels, and the acceptable level or range of levels of risk to human health and the environment. <u>Rules that use the distance between a source area of a confirmed discharge or release to a water supply well or a private drinking water well, as those terms are defined under G.S. 87-85, shall include a determination whether a nearby well is likely to be affected by the discharge or release as a factor in determining levels of risk."</u>

SECTION 11.6.(a) Notwithstanding 15A NCAC 02N .0304(a)(5) (Implementation Schedule for Performance Standards for New UST Systems and Upgrading Requirements for Existing UST Systems Located in Areas Defined in Rule .0301(d)), all UST systems installed

after January 1, 1991, shall not be required to provide secondary containment until January 1, 2020.

SECTION 11.6.(b) Notwithstanding 15A NCAC 02N .0304(a)(5) (Implementation Schedule for Performance Standards for New UST Systems and Upgrading Requirements for Existing UST Systems Located in Areas Defined in Rule .0301(d)), the Commission shall establish a process for the grant of variances from the setbacks required for UST systems from certain public water supply wells, particularly those that serve only a single facility which are not community water systems, if the Commission finds facts to demonstrate that such variance will not endanger human health and welfare or groundwater.

SECTION 11.6.(c) No later than January 1, 2014, the Environmental Management Commission shall adopt rules consistent with the provisions of Section 11.6(a) and Section 11.6(b) of this act. Notwithstanding G.S. 150B-19(4), the rules adopted by the Commission pursuant to this section shall be substantively identical to the provisions of Section 11.6(a) and Section 11.6(b) of this act.

SECTION 11.7.(a) Notwithstanding subsection (a) of 15A NCAC 02N .0903 (Underground Storage Tanks: Tanks), from the effective date of this act the Department of Environment and Natural Resources shall not prohibit the use of tanks that are constructed of steel and cathodically protected as provided in 40 Code of Federal Regulations § 280.20(a)(2) (July 1, 2010 Edition) in order to meet the external corrosion protection standards of that rule.

SECTION 11.7.(b) No later than January 1, 2014, the Environmental Management Commission shall adopt rules consistent with the provisions of Section 11.7(a) of this act. Notwithstanding G.S. 150B-19(4), the rules adopted by the Commission pursuant to this section shall be substantively identical to the provisions of Section 11.7(a) of this act.

SECTION 11.8. Sections 11.1 through 11.8 are effective when they become law and apply to discharges or releases reported on or after that date, except that Section 11.2 applies to discharges or releases reported on or after January 1, 2009.

SECTION 12.(a) G.S. 143-350 reads as rewritten:

"§ 143-350. Definitions.

As used in this Article:

- (3a) "Gray water" means water that is discharged as waste from bathtubs, showers, wash basins, and clothes washers. "Gray water" does not include water that is discharged from toilets or kitchen sinks.
- (3b) "Gray water system" means a water reuse system that is contained within a single family residence or multiunit residential or commercial building that filters gray water or captured rain water and reuses it for nonpotable purposes such as toilet flushing and irrigation.

. . . . "

SECTION 12.(b) G.S. 143-355.5 reads as rewritten:

"§ 143-355.5. Water reuse; policy; rule making.

(a) Water Reuse Policy. – It is the public policy of the State that the reuse of treated wastewater or reclaimed water <u>and the use of gray water or captured rain water</u> is critical to meeting the existing and future water supply needs of the State. The General Assembly finds that reclaimed water systems permitted and operated under G.S. 143-215.1(d2) in an approved wastewater reuse program can provide water for many beneficial purposes in a way that is both environmentally acceptable and protective of public health. This finding includes and applies to conjunctive facilities that require the relocation of a discharge from one receiving stream to another under all of the following conditions:

- (1) The relocation is necessary to create an approved comprehensive wastewater reuse program.
- (2) The reuse program provides significant reuse benefits.
- (3) The relocated discharge will comply with all applicable water quality standards; will not result in degradation of water quality in the receiving waters; will not contribute to water quality impairment in the receiving watershed; and will result in net benefits to water quality, such as the elimination of a wastewater discharge in a nutrient sensitive river basin.

(b) <u>Water Reuse</u> Rule Making. – The Commission shall encourage and promote safe and beneficial reuse of treated wastewater as an alternative to surface water discharge. The Commission shall adopt rules to:

- (1) Identify acceptable uses of reclaimed water, including toilet flushing, fire protection, decorative water features, and landscape irrigation.
- (2) Facilitate the permitting of reclaimed water systems.
- (3) Establish standards for reclaimed water systems that are adequate to prevent the direct distribution of reclaimed water as potable water.

(c) <u>Gray Water Rule Making. – The Commission shall encourage and promote the safe</u> and beneficial use of gray water. The Commission shall adopt rules to:

- (1) <u>Identify acceptable uses of gray water, including toilet flushing, fire</u> protection, decorative water features, and landscape irrigation.
- (2) Facilitate the permitting of gray water systems.
- (3) Establish standards, in coordination with the Commission for Public Health, for gray water systems that protect public health and safety and the environment and reduce the use of potable water within individual structures.

(d) <u>The Department shall develop policies and procedures to promote the voluntary</u> adoption and installation of gray water systems."

SECTION 12.(c) G.S. 130A-335(b) reads as rewritten:

"(b) All wastewater systems shall be regulated by the Department under rules adopted by the Commission except for the following wastewater systems that shall be regulated by the Department under rules adopted by the Environmental Management Commission:

- (1) Wastewater collection, treatment, and disposal systems designed to discharge effluent to the land surface or surface waters.
- (2) Wastewater systems designed for groundwater remediation, groundwater injection, or landfill leachate collection and disposal.
- (3) Wastewater systems designed for the complete recycle or reuse of industrial process wastewater.
- (4) Gray water systems as defined in G.S. 143-350."

SECTION 12.(d) Article 6 of Chapter 153A of the General Statutes is amended by adding a new section to read:

"<u>§ 153A-145. Limitations on regulating cisterns and rain barrels.</u>

No county ordinance may prohibit or have the effect of prohibiting the installation and maintenance of cisterns and rain barrel collection systems used to collect water for irrigation purposes. A county may regulate the installation and maintenance of those cisterns and rain barrel collection systems for the purpose of protecting the public health and safety and for the purpose of preventing them from becoming a public nuisance."

SECTION 12.(e) Article 8 of Chapter 160A of the General Statutes is amended by adding a new section to read:

"§ 160A-202. Limitations on regulating cisterns and rain barrels.

No city ordinance may prohibit or have the effect of prohibiting the installation and maintenance of cisterns and rain barrel collection systems used to collect water for irrigation purposes. A city may regulate the installation and maintenance of those cisterns and rain barrel collection systems for the purpose of protecting the public health and safety and for the purpose of preventing them from becoming a public nuisance."

SECTION 13. Section 5 of S.L. 2007-438, as amended by Section 3(b) of S.L. 2009-484 and Section 19 of S.L. 2010-180, reads as rewritten:

"SECTION 5. This act becomes effective 1 September 2007 and applies to all nutrient offset payments, including those set out in 15A NCAC 2B .0240, as adopted by the Environmental Management Commission on 12 January 2006. The fee schedule set out in Section 1 of this act expires 1 September 2011. when amendments to 15A NCAC 02B .0240 and .0274 become effective."

SECTION 14. Section 2(b) of S.L. 2009-216 reads as rewritten:

"SECTION 2.(b) Implementation. – Notwithstanding sub-subdivision (c) of subdivision (6) of Wastewater Discharge Rule 15A NCAC 02B .0270, each existing discharger with a permitted flow greater than or equal to 0.1 million gallons per day (MGD) shall limit its total nitrogen discharge to its active individual discharge allocation as defined or modified pursuant to Wastewater Discharge Rule 15A NCAC 02B .0270 no later than calendar year 2016.2016, unless the discharger has received an authorization pursuant to G.S. 143-215.1 for construction, installation, or alteration of the treatment works for purposes of complying with the allocation

under Wastewater Discharge Rule 15A NCAC 02B .0270 by December 31, 2016, at which point the compliance date shall be no later than calendar year 2018."

SECTION 15.(a) Notwithstanding G.S. 150B-19, as amended by S.L. 2011-13, the Commission for Public Health may adopt rules to incorporate all or part of the United States Food and Drug Administration Food Code 2009 and to require that employees of establishments regulated under subsections (a) and (a2) of G.S. 130A-248 be certified in food protection in accordance with the United States Food and Drug Administration Food Code 2009.

SECTION 15.(b) G.S. 130A-248 is amended by adding a new subsection to read:

"(a5) The Department of Health and Human Services may grant a variance from rules adopted pursuant to this section in accordance with the United States Food and Drug Administration Food Code 2009 if the Department determines that the issuance of the variance will not result in a health hazard or nuisance condition."

SECTION 16.1. Variance from Setbacks for Public Water Supply Wells. -

(a) The Department of Environment and Natural Resources may grant a variance from the minimum horizontal separation distances for public water supply wells set out in 15A NCAC 18C .0203(2)(d) and 15A NCAC 18C .0203(2)(e) upon finding that:

- (1) The well supplies water to a noncommunity water system as defined in G.S. 130A-313(10)(b) or supplies water to a business or institution, such as a school, that has become a noncommunity water system through an increase in the number of people served by the well.
- (2) It is impracticable, taking into consideration feasibility and cost, for the public water system to comply with the minimum horizontal separation distance set out in the applicable sub-subpart of 15A NCAC 18C .0203(2).
- (3) There is no reasonable alternative source of drinking water available to the public water supply system.
- (4) The granting of the variance will not result in an unreasonable risk to public health.

(b) A variance from the minimum horizontal separation distances set out in 15A NCAC 18C .0203(2)(d) and 15A NCAC 18C .0203(2)(e) shall require that the noncommunity public water supply well meet the following requirements:

- (1) The well shall comply with the minimum horizontal separation distances set out in 15A NCAC 18C .0203(2)(d) and 15A NCAC 18C .0203(2)(e) to the maximum extent practicable.
- (2) The well shall meet a minimum horizontal separation distance of 25 feet from a building, mobile home, or other permanent structure that is not used primarily to house animals.
- (3) The well shall meet a minimum horizontal separation distance of 100 feet from any animal house or feedlot and from cultivated areas to which chemicals are applied.
- (4) The well shall meet a minimum horizontal separation distance of 50 feet from surface water.
- (5) The well shall comply with all other requirements for public well water supplies set out in 15A NCAC 18C .0203.

SECTION 16.2. Rule Making. – The Commission for Public Health shall adopt rules that are substantively identical to the provisions of Section 16.1. The Commission may reorganize or renumber any of the rules to which this section applies at its discretion. Rules adopted pursuant to this section are not subject to G.S. 150B-21.9 through G.S. 150B-21.14. Rules adopted pursuant to this section shall become effective as provided in G.S. 150B-21.3(b1) as though 10 or more written objections had been received as provided by G.S. 150B-21.3(b2).

SECTION 16.3. Effective Date. – Section 16.1 of this act expires when permanent rules to replace Section 16.1 have become effective as provided by Section 16.2 of this act.

SECTION 17.(a) Definitions. – The following definitions apply to this act and its implementation:

- (1) The definitions set out in G.S. 113A-103 and G.S. 143-212.
- (2) The definitions set out in the Neuse River Basin Riparian Buffer Rule and the Tar-Pamlico River Basin Riparian Buffer Rule.
- (3) "Coastal wetlands" means marshland as defined in G.S. 113-229.

- (4) "Commission" means the Environmental Management Commission.
- (5) "Existing lot" means a lot of two acres in size or less that was platted and recorded in the office of the appropriate county Register of Deeds prior to August 1, 2000.
- (6) "Neuse River Basin Riparian Buffer Rule" means 15A NCAC 02B .0233 (Neuse River Basin: Nutrient Sensitive Waters Management Strategy: Protection and Maintenance of Existing Riparian Buffers), effective August 1, 2000.
- (7) "Tar-Pamlico River Basin Riparian Buffer Rule" means 15A NCAC 02B .0259 (Tar-Pamlico River Basin: Nutrient Sensitive Waters Management Strategy: Protection and Maintenance of Existing Riparian Buffers), effective August 1, 2000.

SECTION 17.(b) Neuse River Basin Riparian Buffer Rule and Tar-Pamlico River Basin Riparian Buffer Rule. – Until the effective date of the revised permanent rules that the Commission is required to adopt pursuant to Section 17.(d) of this act, the Commission and the Department shall implement the Neuse River Basin Riparian Buffer Rule and the Tar-Pamlico River Basin Riparian Buffer Rule, as provided in Section 17.(c) of this act.

SECTION 17.(c) Implementation. – The riparian buffer requirements of the Neuse River Basin Riparian Buffer Rule and the Tar-Pamlico River Basin Riparian Buffer Rule shall apply to development of an existing lot located adjacent to surface waters in the coastal area as provided in this section. Where application of the riparian buffer requirements would preclude construction of a single-family residence and necessary infrastructure, such as an on-site wastewater system, the single-family residence may encroach on the buffer if all of the following conditions are met:

- (1) The residence is set back the maximum feasible distance from the normal high-water level or normal water level, whichever is applicable, on the existing lot and designed to minimize encroachment into the riparian buffer.
- (2) The residence is set back a minimum of 30 feet landward of the normal high-water level or normal water level, whichever is applicable.
- (3) Stormwater generated by new impervious surface within the riparian buffer is treated and diffuse flow of stormwater is maintained through the buffer.
- (4) If the residence will be served by an on-site wastewater system, no part of the septic tank or drainfield may encroach into the riparian buffer.

SECTION 17.(d) Additional Rule-Making Authority. – The Commission shall adopt a rule to amend the Neuse River Basin Riparian Buffer Rule and the Tar-Pamlico River Basin Riparian Buffer Rule. Notwithstanding G.S. 150B-19(4), the rules adopted by the Commission pursuant to this section shall be substantively identical to the provisions of Section 17.(c) of this act. Rules adopted pursuant to this section are not subject to G.S. 150B-21.9 through G.S. 150B-21.14. Rules adopted pursuant to this section shall become effective as provided in G.S. 150B-21.3(b1) as though 10 or more written objections had been received as provided by G.S. 150B-21.3(b2).

SECTION 17.(e) The Department of Environment and Natural resources shall study the application and implementation of the Neuse River Basin Riparian Buffer Rule and the Tar-Pamlico River Basin Riparian Buffer Rule. The Department shall specifically consider: (i) whether the rules might be amended or implemented in a different way to achieve the same level of water quality protection while reducing the impact to riparian property owners in the river basins; and (ii) exempting all single family residence lots platted prior to August 1, 2000. In conducting this study, the Department shall consult with representatives of the development community, the agricultural community, the forestry industry, the environmental community, local governments, property owners, and other interested parties. The Department shall report its findings and recommendations to the Environmental Review Commission no later than February 1, 2012.

SECTION 18.(a) Definitions. – The definitions set out in G.S. 106-202.12 and 02 NCAC 48F .0305 (Collection and Sale of Ginseng Rule) apply to this section and its implementation.

SECTION 18.(b) Collection and Sale of Ginseng Rule 02 NCAC 48F .0305. – Until the effective date of the revised permanent rule that the Board is required to adopt pursuant to Section 18(d) of this act, the Board and the Department shall implement Collection and Sale of Ginseng Rule 02 NCAC 48F .0305, as provided in Section 18(c) of this act.

Session Law 2011-394

SECTION 18.(c) Implementation. – Notwithstanding subdivision (6) of subsection (d) of Collection and Sale of Ginseng Rule 02 NCAC 48F .0305, there shall be no charge for an export certification.

SECTION 18.(d) Additional Rule-Making Authority. – The Board shall adopt a rule to replace Collection and Sale of Ginseng Rule 02 NCAC 48F .0305. Notwithstanding G.S. 150B-19(4), the rule adopted by the Board pursuant to this section shall be substantively identical to the provisions of Section 18(c) of this act. Rules adopted pursuant to this section are not subject to the publication of notice of text or public hearing requirements of G.S. 150B-21.2. Rules adopted pursuant to this section are not subject to G.S. 150B-21.14. Rules adopted pursuant to this section shall become effective as provided in G.S. 150B-21.3(b1) as though 10 or more written objections had been received as provided by G.S. 150B-21.3(b2).

SECTION 19. Section 6 of S.L. 2007-523 reads as rewritten:

"**SECTION 6.** Effective Dates. – Section 3 of this act becomes effective 1 July 2007. All other sections of this act become effective 1 September 2007. Section 4 of this act expires 1 September 2017.2011."

SECTION 20. The Department of Environment and Natural Resources shall study the stormwater management requirements for airports in the State. The Department shall specifically consider whether the requirements might be amended or implemented in a different way to achieve the same level of water quality protection while reducing the cost and other regulatory burdens associated with compliance with the requirements. In conducting this study, the Department shall consult with representatives of the airports in the State. The Department shall report its findings and recommendations to the Environmental Review Commission no later than February 1, 2012.

SECTION 21. In order to ensure the ongoing delivery of services by the nonpoint source pollution control programs of the Division of Forest Resources and the Division of Soil and Water Conservation, the Division of Water Quality in the Department of Environment and Natural Resources shall transfer Clean Water Act (CWA) Section 319 Nonpoint Source Management Program Base Grant funds to the Division of Forest Resources and Division of Soil and Water Conservation, where consistent with the federal grant program requirements, in an amount that is no less than the average annual amount of funding received by each of those two Divisions over the two most-recent fiscal bienniums. In the event that the level of Section 319 base grant funds received by the Department of Environment and Natural Resources by the United States Environmental Protection Agency is increased or decreased in any funding cycle, the level of funding received by the Division of Forest Resources and the Division of Soil and Water Conservation shall be adjusted proportionally. Section 319 Nonpoint Source Management Program Competitive Grant funds shall consider water quality benefit and be distributed in a fair and equitable manner based on the grant requirements and the benefit. The Division of Water Quality will establish a Workgroup of Nonpoint Source Agencies, including the Division of Forest Resources and the Division of Soil and Water Conservation, which will consider the competitive grant project proposals. The Workgroup will be given full input to the project funding decisions.

SECTION 22. If House Bill 750, 2011 Regular Session, becomes law, then G.S. 130A-55(7), as amended by Section 2 of that act, reads as rewritten:

"§ 130A-55. Corporate powers.

A sanitary district board shall be a body politic and corporate and may sue and be sued in matters relating to the sanitary district. Notwithstanding any limitation in the petition under G.S. 130A-48, but subject to the provisions of G.S. 130A-55(17)e, each sanitary district may exercise all of the powers granted to sanitary districts by this Article. In addition, the sanitary district board shall have the following powers:

(7) To adopt rules necessary for the proper functioning of the district. However, these rules shall not conflict with rules adopted by the Commission for Public Health, Environmental Management Commission, or the local board of health having jurisdiction over the area. Further, such <u>sanitary district</u> <u>board</u> rules shall be no more restrictive than or conflict with requirements or ordinances of any county having jurisdiction over the area, and, if a conflict should arise, the requirements or ordinances of the county having jurisdiction over the area shall control.

SECTION 23.(a) G.S. 130A-295.04 reads as rewritten:

"§ 130A-295.04. Financial responsibility requirements for applicants for a permit and permit holders for hazardous waste facilities.

(a) In addition to any other financial responsibility requirements for solid waste management facilities under this Part, the applicant for a permit or a permit holder for a hazardous waste facility shall establish financial assurance that will ensure that sufficient funds are available for facility closure, post-closure maintenance and monitoring, any corrective action that the Department may require, and to satisfy any potential liability for sudden and nonsudden accidental occurrences, and subsequent costs incurred by the Department in response to an incident at a facility, even if the applicant or permit holder becomes insolvent or ceases to reside, be incorporated, do business, or maintain assets in the State.

(b) To establish sufficient availability of funds under this section, the applicant for a permit or a permit holder for a hazardous waste facility may use insurance, financial tests, third-party guarantees by persons who can pass the financial test, guarantees by corporate parents who can pass the financial test, irrevocable letters of credit, trusts, surety bonds, or any other financial device, or any combination of the foregoing, shown to provide protection equivalent to the financial protection that would be provided by insurance if insurance were the only mechanism used.

(c) The applicant for a permit or a permit holder for a hazardous waste facility, and any parent, subsidiary, or other affiliate of the applicant, permit holder, or parent, including any joint venturer with a direct or indirect interest in the applicant, permit holder, or parent, shall be a guarantor of payment for closure, post-closure maintenance and monitoring, any corrective action that the Department may require, and to satisfy any potential liability for sudden and nonsudden accidental occurrences arising from the operation of the hazardous waste facility.

(d) In addition to any other financial assurance requirements for hazardous waste management facilities under this section, an applicant for a permit or a permit holder for a commercial hazardous waste facility shall establish financial assurance that will ensure that sufficient funds are available for corrective action and for off-site screening for potential migration of contaminants in the event of a release of hazardous waste or hazardous waste constituents into the environment in an amount approved by the Department. The applicant for a permit or a permit holder may not use a financial test or captive insurance to establish financial assurance under this subsection.

(c) The Department may require an applicant for a permit for a hazardous waste facility to provide cost estimates for facility closure, post-closure maintenance and monitoring, and any corrective action that the Department may require to the Department. The Department may require an applicant for a permit for a commercial hazardous waste facility to provide cost estimates for off-site screening for potential migration of contaminants in the event of a release of hazardous waste or hazardous waste constituents into the environment.

(f) Assets used to meet the financial assurance requirements of this section shall be in a form that will allow the Department to readily access funds for the purposes set out in this section. Assets used to meet financial assurance requirements of this section shall not be accessible to the permit holder except as approved by the Department. <u>Compliance with the financial assurance requirements set forth in Subpart H of Part 264 of 40 Code of Federal Regulations (July 1, 2010 edition) shall be sufficient to meet the requirements of this subsection.</u>

(g) The Department may provide a copy of any filing that an applicant for a permit or a permit holder for a hazardous waste facility submits to the Department to meet the financial responsibility requirements under this section to the State Treasurer. The State Treasurer shall review the filing and provide the Department with a written opinion as to the adequacy of the filing to meet the purposes of this section, including any recommended changes.

(h) In order to continue to hold a permit for a hazardous waste facility, a permit holder must maintain financial responsibility as required by this Part and must provide any information requested by the Department to establish that the permit holder continues to maintain financial responsibility.

(i) An applicant for a permit or a permit holder for a hazardous waste facility shall satisfy the Department that the applicant or permit holder has met the financial responsibility requirements of this Part before the Department is required to otherwise review the application.

(j) The Commission may adopt rules regarding financial responsibility in order to implement this section."

SECTION 23.(b) The Commission shall adopt rules regarding financial responsibility in order to implement Section 23.(a) of this act. Such rules, however, shall not exceed or be more stringent than requirements for financial responsibility for applicants for a permit and permit holders for hazardous waste facilities provided by federal regulation or law.

SECTION 24. Except as otherwise provided, this act is effective when it becomes law. Section 8(b) of this act applies to every major facility construction project, as defined in G.S. 143-135.36, and every major facility renovation project, as defined in G.S. 143-135.36, of a public agency, as defined in G.S. 143-135.36, that has not entered the schematic design phase prior to the effective date of this act.

In the General Assembly read three times and ratified this the 18th day of June, 2011.

s/ Philip E. Berger President Pro Tempore of the Senate

s/ Thom Tillis Speaker of the House of Representatives

This bill having been presented to the Governor for signature on the 20th day of June, 2011 and the Governor having failed to approve it within the time prescribed by law, the same is hereby declared to have become a law. This 1st day of July, 2011.

s/ Karen Jenkins Enrolling Clerk



State of North Carolina

Utilities Commission

4325 Mail Service Center Raleigh, NC 27699-4325

COMMISSIONERS EDWARD S. FINLEY, JR., CHAIRMAN WILLIAM T. CULPEPPER, III BRYAN E. BEATTY

July 19, 2012

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

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

Dear Secretary Freeman:

In August 2007, the North Carolina General Assembly enacted comprehensive energy legislation, Session Law 2007-397 (Senate Bill 3), 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, 2012, is appreciated so that the Commission may meet its deadline. Secretary Dee Freeman July 19, 2012 Page 2

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

Very truly yours,

Edward S. Finley , &

Edward S. Finley, Jr.

ESF/LSW

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



North Carolina Department of Environment and Natural Resources

Beverly Eaves Perdue Governor Dee Freeman Secretary

September 18, 2012

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

Re: Renewable Energy and Energy Efficiency Portfolio Standard

Dear Mr. Finley:

I am writing in response to your letter of July 19, 2012 to Secretary Freeman requesting any public comment that the Department of Environment and Natural Resources may have received regarding the direct, secondary and cumulative environmental impacts of the implementation of the Renewable Energy and Energy Efficiency Portfolio Standard (REPS). There continues to be interest in development of renewable energy sources in the state ranging from wind farms to biomass combustion sources. A number of projects have moved through the permitting process in the past year including some biomass combustion projects. The biomass projects raised some fairly complex questions about interpretation of federal Clean Air Act requirements, but those issues have been resolved.

At least two onshore wind projects that received Utility Commission approval have been delayed. Federal environmental review of the Pantego Wind project (in Beaufort County) identified concerns about impacts on migratory waterfowl and a potential threat to the endangered American bald eagle. The Pantego Wind site is located near Pocosin Lakes National Wildlife Refuge -- an area that is home to large numbers of migratory birds, such as swans, in the winter months. The United States Army Corps of Engineers has requested the applicant to do additional studies of bird mortality as part of that permitting process.

Both state and federal agencies have received questions about the potential impact of coastal wind projects on military training activities. One concern has to do with potential radar interference for some distance from the turbines. The United States Air Force has also expressed concern about conflict with low-level military training flights in the coastal area of North Carolina. The coastal counties have a significant amount of special use airspace designated for military operations and training conducted out of Navy, Marine Corps and Air Force bases on the North Carolina coast and in southern Virginia. The "floor" on these military training routes can be as low as 500 feet; by comparison the Pantego turbines would be approximately 492 feet tall to the tip of the blades. Officials at Seymour Johnson Air Force Base in Goldsboro are particularly concerned about flight training corridors near the Pantego site. The United States



Navy, which runs training flights out of the Naval Air Station in Oceana Virginia, has some of the same concerns about the proposed Atlantic Wind project in Pasquotank County.

State officials are in discussion with representatives from the military bases about possible conflict between wind turbine sites and military training operations on the North Carolina coast. Both wind projects have been delayed for unrelated reasons (Pantego to do bird studies and Atlantic Wind because of the lack of a power purchase agreement), which should allow time to better understand and potentially resolve the military concerns.

Please call me at 919-707-8619 if you have questions.

Sincerely,

Robin W. Smith Assistant Secretary for Environment

Cc: Dee Freeman

APPENDIX 2

STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. E-43, SUB 6 DOCKET NO. E-100, SUB 113 DOCKET NO. EC-33, SUB 58 DOCKET NO. EC-83, SUB 1

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-43, SUB 6

In the Matter of North Carolina Municipal Power Agency No. 1 – 2008 REPS Compliance Report

DOCKET NO. E-100, SUB 113

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

DOCKET NO. EC-33, SUB 58

In the Matter of Halifax Electric Membership Corporation – 2008 REPS Compliance Report

DOCKET NO. EC-83, SUB 1

In the Matter of GreenCo Solutions, Inc. – 2008 REPS Compliance Report ORDER REQUIRING ELECTRIC MEMBERSHIP CORPORATIONS AND MUNICIPAL POWER SUPPLIERS TO FILE MEASUREMENT AND VERIFICATION PLANS AND RESULTS FOR ENERGY EFFICIENCY AND DEMAND-SIDE MANAGEMENT PROGRAMS

BY THE COMMISSION: On August 24, 2010, in Docket No. E-100, Sub 113, the Commission issued an Order Requesting Comments On Measurement and Verification (M&V) of Reduced Energy Consumption (M&V Order). That M&V Order noted that G.S. 62-133.8(c)(2) allows electric membership corporations (EMCs) and municipal power suppliers to meet their general Renewable Energy and Energy Efficiency Portfolio Standard (REPS) compliance obligation in a variety of ways, including via reduced energy consumption through the implementation of demand-side management (DSM) or energy efficiency (EE) measures. The Order stated that the Commission's rules might be inadequate to ensure the credibility of the energy efficiency certificates (EECs) issued in

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the North Carolina Renewable Energy Tracking System (NC-RETS) and subsequently used for REPS compliance, especially regarding the EE and DSM activities of EMCs and municipal power suppliers, because municipal power suppliers are not required to make any M&V filings with the Commission, and EMCs are required to only file their M&V plans, not the actual results of their EE and DSM programs. The M&V Order sought comments on these issues as well as on the appropriate method of determining energy savings from DSM programs. The Order also asked parties to address the question of what kind of M&V documentation should be required from each kind of electric power supplier. The Order further required electric power suppliers to refrain from creating EECs in NC-RETS until these issues could be resolved by the Commission.

In addition, several electric power suppliers' REPS compliance reports have raised issues as to whether their reported energy savings have been adequately documented. On May 3, 2011, the Commission issued orders in Dockets No. E-43, Sub 6; EC-33, Sub 58; and EC-83, Sub 1, the 2008 REPS compliance reports for the North Carolina Municipal Power Agency No.1 (NCMPA1), Halifax EMC (Halifax), and GreenCo Solutions, Inc. (GreenCo), respectively. In those orders, the Commission found that the quantification of potential EECs by NCMPA1, Halifax, and GreenCo in their 2008 REPS compliance reports should be accepted subject to resolution of the issues posed in the M&V Order, and should be reconsidered following the submission of M&V data supporting such estimates by NCMPA1, Halifax, and GreenCo.

On October 14, 2010, ElectriCities of North Carolina, Inc. (ElectriCities), filed comments. On October 15, 2010, comments were filed jointly by the Environmental Defense Fund, the Southern Alliance for Clean Energy, and the Southern Environmental Law Center (collectively, the Environmental Intervenors). Also on October 15, 2010, comments were filed by jointly by Dominion North Carolina Power (Dominion), Duke Energy Carolinas, LLC (Duke), and Progress Energy Carolinas, Inc. (PEC), collectively, the Investor-Owned Utilities (IOUs); GreenCo; the North Carolina Sustainable Energy Association (NCSEA); the Public Works Commission of the City of Fayetteville (Fayetteville); and the Public Staff – North Carolina Utilities Commission (Public Staff).

On November 19, 2010, reply comments were filed by the Environmental Intervenors, Fayetteville, the IOUs, NCSEA, and the Public Staff.

Issue 1: What kind of M&V documentation should be filed and/or made available for audit by each kind of electric power supplier that uses EE/DSM program achievements toward its general REPS obligation?

ElectriCities stated that municipal power suppliers or their utility compliance aggregator should be required to develop and maintain an M&V plan for each EE/DSM program where its resulting energy savings are used toward REPS compliance. They proposed that these M&V plans, along with the data and calculations involved in the determination of energy savings, should be made available for audit by the Public Staff and the Commission, but should not be submitted with any REPS report.

Fayetteville commented that municipal utilities should file M&V methods in their annual REPS compliance plans, and that these M&V methods should be the ones used in the two subsequent calendar years covered by the plan. In addition, Fayetteville stated:

Standardized measurement methodology should be deemed approved. Non-standardized measurement methodologies should be identified and subject to review by the NCUC [Commission] for ... 90 days, after which they should be deemed approved. Actual measurement data ... should be retained for audit by a qualified independent third party but not filed. By preapproving measurement methodologies, audits can be limited to whether EE and DSM program results were computed accurately

Fayetteville also raised concerns regarding the cost of M&V:

[I]f administrative functions impose an excessive demand on the resources of an electric power supplier, the cost of such administrative functions could potentially undermine the goals of REPS by utilizing an undue amount of an electric power supplier's annual cost cap...

Fayetteville proposed that M&V costs be limited to no more than five percent of an electric power supplier's annual expenditures on EE and DSM programs, up to the annual cost cap imposed by G.S. 62-133.8(h).

NCSEA stated that all three kinds of electric power suppliers (IOUs, EMCs, and municipal power suppliers) should file and make available for audit the same kind of M&V documentation. According to NCSEA, each M&V plan should address metering, monitoring, analysis methods, quality assurance, responsible personnel, sampling, and measurement. NCSEA stated that this information will ensure that all M&V activities follow an acceptable protocol. NCSEA stated that in order for M&V results to be credible, a uniform M&V protocol should be established, and that the Commission should consider adopting the M&V protocol established by the Efficiency Valuation Organization, a non-profit corporation, in its International Performance Measurement and Verification Protocol.

The Environmental Intervenors recommended that electric power suppliers should file M&V documentation that is consistent with accepted protocols, and they listed several examples of such protocols, including the International Performance Measurement and Verification Protocol. The Environmental Intervenors provided an outline for such a protocol which would require an electric power supplier to provide the following information for each EE/DSM program: number of participants and number of installations by each participant; the annual energy and peak demand savings achieved by each installation at the participant's meter; a "net-to-gross ratio," which would be calculated based on transmission and distribution losses; the estimated number of "free riders" and "free drivers;" and the energy and capacity "rebound effect." This data would be used to estimate and report each program's annual energy and peak demand savings as measured at the electric generator source. GreenCo proposed that the justification for the validity of any proposed M&V method should be furnished by GreenCo at the time it reports EECs, and that program specific information used to calculate savings should be retained by GreenCo for audit purposes.

The IOUs stated that current Rule R8-68 (filing requirements for new EE/DSM programs) and Rule R8-69 (cost recovery for DSM and EE programs) already provide for adequate M&V documentation by electric public utilities. They observed that additional materials are available for audit, including third-party research. Further, the IOUs commented that while reporting consistency and standard protocols are laudable goals in theory, M&V protocols are not "one-size-fits-all" and must be assessed on a supplier-by-supplier and case-by-case basis.

The Public Staff proposed that each electric power supplier should file information showing that it has established M&V protocols. Supporting documentation should be made available for audit and should include reports and correspondence from the electric power supplier's consultant; descriptions of methods and procedures; customer surveys and response data; analyses of survey results; and calculations supporting energy savings used for REPS compliance purposes.

Issue 2: Whether and in what proceeding, if any, should the Commission review such M&V documentation in order to establish the savings from EE/DSM programs that may then be used by each kind of electric power supplier to comply with REPS?

ElectriCities and Fayetteville maintained that the Commission should only review a power supplier's M&V data in the context of its REPS compliance report, and then only if there is a dispute between the Public Staff and the power supplier concerning EE/DSM achievements. In that event, M&V documentation for the disputed program would be submitted during the compliance report hearing.

The Environmental Intervenors recommended that detailed M&V documentation should be filed and available for audit during "individual program dockets," subject to review by the Commission and parties, and that such review should be conducted every two years. They suggested that the Commission clarify the distinction between "estimated" and "verified" energy savings. They explained that each electric power supplier or compliance aggregator should include in its REPS compliance report its estimated EE/DSM savings data, and they provided a proposed format for presenting participation data, M&V compliance data, and the calculation of EE impacts in the REPS compliance report. They recommended that utilities be allowed to revise their estimated program impacts within one year, under limited circumstances. Further, the Environmental Intervenors opposed reviewing M&V documentation in EE/DSM rider proceedings, stating that approach would "delay the review … and leave such review to a "high stakes" proceeding in which M&V is used to determine the amount of lost revenues and shareholder incentive payments to be recovered."

GreenCo agreed with the municipal power suppliers that Commission review would only be needed in the event of a challenge from the Public Staff or another party. However, GreenCo stated that:

[T]he Commission should not wait until GreenCo files its compliance report, wherein it claims [for REPS compliance] any particular RECs derived from EE or DSM, to undertake an exhaustive review of the methodology and outcome of the process. Instead, GreenCo recommends that the Commission perform its review function well prior to GreenCo's compliance report, either as part of the IRP [integrated resource plan] docket in which GreenCo's compliance plans are filed, or in a separate docket.

In its reply comments, Fayetteville agreed with GreenCo, stating that:

[T]he significant time lag that may be inherent in REPS compliance proceedings could prevent electric power suppliers from learning about shortcomings with their measurement and verification methodologies and documentation for three (3) years or more after the methodology is implemented and documentation is collected... To the extent that the Public Staff intends to wait until RECs are used or retired before reviewing M&V documentation, these problems associated with delay would be exacerbated.

Fayetteville's reply comments proposed the following process flow:

1) The NCUC should pre-approve the M&V parameters and methods.

2) Any challenge to EECs identified in annual compliance reports that were measured using the Commission-approved parameters and methods should be started within 60 days of filing the compliance report.

3) Non-standard measurement methods should be identified and be subject to review by the Commission for 90 days, after which they would be deemed to be approved.

4) Actual measurement data should be retained for audit by a qualified independent third party since a third party would typically be able to complete an audit quickly, if such an audit is needed.

5) An audit should be implemented only when the Commission believes there is sufficient cause to justify the time and expense.

6) All audit costs incurred by an electric power supplier should be counted against the REPS annual cost cap.

In addition, Fayetteville stated that the State's electric power suppliers all have different resources available to them and different customer base sizes:

To the extent the NCUC's measurement, verification, and documentation requirements impose significant fixed costs or onerous requirements,

smaller electric power suppliers will have fewer retail customers to whom these costs will be allocated.

The IOUs contended that the Commission should review M&V documentation during EE/DSM cost recovery proceedings because energy savings are used in the determination of program incentives and net lost revenues. They believe the Commission's existing processes and rules are sufficient.

The Public Staff stated that M&V documentation should be reviewed during EE/DSM rider proceedings for the electric public utilities and during REPS compliance proceedings for EMCs and municipal power suppliers. Because municipal power suppliers are not required to obtain Commission approval of EE/DSM programs, they should be required to include M&V plans in their REPS compliance plans.

Discussion and Conclusions Regarding Issues 1 and 2

The Commission has carefully considered the parties' comments and is cognizant of the need to balance the expense and delays that complex filing requirements and protracted M&V proceedings could present against the requirement that REPS compliance be verified in a credible manner. The Commission agrees with the Public Staff and the IOUs that the existing processes are adequate for electric public utilities. Those entities are required to file M&V plans with their EE/DSM program applications, and their EE/DSM rider proceedings provide a timely forum for review of the implementation and results of those M&V plans. These processes have been in place for several years, and the Commission finds and concludes that the IOUs and the Public Staff are generally using those processes to assure that EE/DSM programs are receiving an appropriate level of scrutiny. By way of illustration, the Commission's February 26, 2009 Order in Duke's "Save-a-Watt" proceeding (Docket No. E-7, Sub 831) found that:

Duke's M&V plan, which was commended by a number of other parties, provides for an independent review and evaluation of its proposed programs by establishing initial evaluation plan summaries that propose specific EE evaluation studies and activities. Third-party evaluation professionals will design, manage, and supervise the M&V plan and evaluations. Evaluations will be based on engineering projections of savings, as well as actual field evaluations, metering, monitoring, and M&V. Duke intends to verify generally about 5% of the installed measures, focusing more on high-savings and high-priority measures. Most utilities across the country set verification levels for their programs from zero to 10% of installed measures. Duke's M&V plan is state-of-the-art and conforms to the approaches described in the California Evaluation Protocols, National Action Plan for Energy Efficiency (NAPEE), and the International Performance Measurement and Verification Protocol (IPMVP).

Based upon the foregoing, Duke's M&V plan appears to be adequate and reasonable for its proposed programs. Accordingly, the Commission approves Duke's M&V plan.

The Commission's November 14, 2011 Order in PEC's EE/DSM rider proceeding (Docket No. E-2, Sub 1002) found that:

While the initial evaluation, measurement, and verification (EM&V)^[1] analyses and reports prepared by PEC are adequate, refinements and improvements are appropriate for future reports.

The Commission agrees with the Public Staff that PEC should incorporate more detail, as described by witness Floyd, in its future EM&V analyses. The Commission finds and concludes that PEC should file its EM&V schedule, including identification of major milestones such as the schedule for completing the initial sample design; the schedule for completing the process and impact evaluations; and the date for the completion of the EM&V report for each DSM/EE program. The Commission requests that PEC and the Public Staff collaborate on the definition of major milestones that should be included in the EM&V schedule. Further the Commission finds and concludes that the parties should file an EM&V schedule with the Commission, which incorporates such additional details, within 60 days of this Order.

PEC has since filed the required schedule, and it is available for public review.

Finally, the Commission's December 13, 2011 Order in Dominion's EE/DSM rider proceeding (Docket No. E-22, Sub 473), found that:

It is reasonable and appropriate for the Company to file its evaluation, measurement and verification (EM&V) reports on or before April 1 of each year. Such reports should include sufficient information and an analysis of the gross and net savings and costs of the programs so that the Public Staff and the Commission may fully evaluate net-to-gross adjustments made by [Dominion] to determine the actual savings for each DSM or EE program.

Subsequently, Dominion filed an M&V report that is several hundred pages in length which is available for review by parties. Therefore, based on the comments of the IOUs and the Public Staff, and the record in the aforementioned Duke, PEC, and Dominion EE/DSM rider proceedings, the Commission finds and concludes that the existing M&V processes for electric public utilities are adequate.

¹For purposes of this Order, EM&V is synonymous with M&V.

The Commission appreciates the thorough recommendations made by the Environmental Intervenors who advocated the need for rigorous and consistent M&V protocols. Several parties advocated that all electric power suppliers be required to establish and implement such protocols, and the NCSEA recommended that one uniform M&V protocol be established for all North Carolina electric power suppliers. Such rigorous methods are appropriate for the IOUs because they are relatively large and their EE programs are not subject to the REPS cost cap. However, the Commission agrees with the IOUs that M&V protocols can and should be customized from program to program, based on the relative number of participants; the age of the program; the savings results that have been reported by other organizations with similar programs; and a host of other factors. The Public Staff has been actively reviewing the M&V plans and results of the IOUs in their program application and EE/DSM rider proceedings, and the Commission has generally found that the Public Staff and the IOUs are putting an appropriate emphasis on M&V. Finally, to the extent that a party believes that an electric public utility is not employing appropriate M&V protocols, the Commission encourages such party to file comments in specific EE/DSM rider proceedings.

The issue remaining, then, is the appropriate M&V approach for EMCs and municipal power suppliers. There is agreement among all parties that the existing REPS processes need to be modified in order to ensure that all electric power suppliers that intend to use energy savings for REPS compliance have an M&V plan for each EE/DSM program, and that each M&V plan is implemented appropriately. The Public Staff stated that it is appropriate to require all electric power suppliers to (1) file information demonstrating that they have developed M&V protocols; (2) file the M&V results; and (3) retain for audit information supporting their M&V results. The Commission agrees. However, as noted by Fayetteville, for electric power suppliers that have extremely small customer bases and hence, extremely low REPS cost caps,² rigorous M&V protocols would be inappropriate. The expense could quickly dwarf the economic value of the energy savings being measured. Therefore, the Commission chooses not to adopt one uniform statewide M&V but instead will require each EMC and municipal power supplier, regardless of its small size, to provide an M&V plan in its annual REPS compliance plan, and M&V results in its annual REPS compliance report that, at a minimum:

1) Provide a reliable accounting of the number of participants/installations achieved by an EE/DSM program each calendar year;

2) Establish and/or rely upon a reasonably sound and conservative estimate of the amount of energy saved per participant/installation; and

3) Establish and/or rely upon a reasonably sound and conservative estimate of the number of years one could expect those savings to persist.

²The EE/DSM expenses of electric public utilities are not subject to the REPS cost caps because these expenses are recovered via the EE/DSM riders that are authorized by G.S. 62-133.9. See G.S. 62-133.8(h)(l)(a).

In order to preserve REPS budgets for higher priority items including the solar, poultry waste, and swine waste set-asides, the Commission will allow smaller electric power suppliers to rely on the energy savings and persistence data reported and published by another organization to the extent that organization's data is based on a reliable sample size for a similar program and rigorous M&V methods were employed.

Fayetteville suggested specific deadlines for challenges to M&V plans or resulting EECs. The Commission will decline to impose such deadlines, noting that the Public Staff thus far has been reviewing M&V data and EECs in REPS compliance plans and reports without the benefit of guidance from the Commission. The Commission anticipates that the specific minimum M&V requirements established in this Order will speed the Public Staff's review. However, if an electric power supplier wants concurrence that its M&V plans and results meet or exceed the minimum requirements established by this Order, the Commission encourages it to review those M&V plans and EEC calculations with the Public Staff prior to filing them with the Commission.

Therefore, the Commission finds and concludes that it is necessary to amend its REPS rules. Rule R8-67(b), which lists the requirements for annual REPS compliance plans, will be amended as shown in Appendices A and B attached hereto, to require EMCs and municipal power suppliers to include the M&V plans for the DSM/EE programs that are included in their REPS compliance plans. In addition, Rule R8-67(c), which lists the requirements for annual REPS compliance reports, will also be amended as shown in Appendices A and B to require EMCs and municipal power suppliers to include the results of their M&V plans and retain for audit supporting documentation.

The Environmental Intervenors suggested that the Commission clarify the distinction between "estimated" and "verified" energy savings. The Commission has reviewed its rules and agrees that clarification is needed. In particular, Rule R8-67(c)(1) requires the annual filing of a REPS compliance report and lists the documentation that must be provided, including the following:

(i) The sources, amounts and costs of renewable energy certificates, by source, used to comply with [REPS]. Renewable energy certificates for energy efficiency may be based on estimates of reduced energy consumption through the implementation of energy efficiency measures, to the extent allowed by the Commission.

As cited in the above rule, "estimates of reduced energy consumption" can occur in two acceptable ways. First, for an electric power supplier that has a robust M&V plan, in the early years of a particular EE program that utility should provide an accurate accounting of how many installations were achieved, but it might not yet have completed the energy savings verification portion of its M&V plan. In such an instance, the Commission will allow the electric power supplier to create EECs based on an "estimate" of energy savings achieved, with the understanding that a true-up could be needed in a subsequent proceeding if M&V later demonstrates that actual energy savings achieved for a given vintage year were higher or lower than the initial estimate. "Verified" energy savings are those that have been proven via implementation of an M&V plan.

Second, for a smaller electric power supplier whose M&V plan meets the minimum requirements as discussed earlier in this Order, the Commission will allow the use of energy savings estimates provided that the electric power supplier demonstrates the basis for those estimates. Such electric power suppliers may create EECs in NC-RETS based on the actual number of participants and installations, but using an estimate of the energy savings and persistence.

For all electric power suppliers, EECs should not be created in NC-RETS until the actual number of participants/installations for a given year is known, and EECs should be created in annual increments, even for installations whose energy savings will persist for several years. For example, if the installations accomplished in a given year for a specific program are expected to produce energy savings for five years, the electric power supplier should create corresponding EECs each year for five years.

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

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

In order to be consistent with the policy described earlier, the Commission concludes that it is necessary to amend Rule R8-67(h)(10) as shown below and in Appendices and B attached hereto:

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

Issue 3: What is the appropriate method for determining the energy savings achieved by an EMC or municipal power supplier's DSM measure or program?

ElectriCities stated that utility compliance aggregators for their group of electric power suppliers should apply industry best practices for M&V methods to arrive at kW demand reductions for DSM measures. This would include testing the metered effects of a DSM measure against a base-line load using regression modeling. Then, energy savings would be determined by using engineering estimates based on the number of hours of operation in a year, accounting for the availability of individual control devices. Field testing a representative sample of participating customers and comparing the results with a sample of non-participating customers would provide validation of the engineering estimates.

NCSEA recommended that the Commission should only include energy savings from those DSM measures that result in reduced energy consumption as opposed to a shift in the timing of energy consumption. Similarly, the Environmental Intervenors stated that "a reduction in capacity requirements does not necessarily translate into a reduction in energy consumption." NCSEA explained that there are three generally accepted methods of M&V for DSM measures. "Large scale data analysis" requires that the electric power supplier use billing data to determine energy savings based on actual usage before and after a DSM measure is implemented. The "deemed savings method" assigns a specific savings amount to each instance in which a specific measure is implemented (e.g. a fixed number of kWh savings for each installation). Finally, actual field measurements can be conducted to determine energy savings.

GreenCo responded that:

...it understands that DSM programs will often not result in reduced, as opposed to shifted, energy use, but emphasizes that there is potential for reduced energy consumption in certain DSM programs....

GreenCo observed that the measurement of energy impacts from DSM could vary with the nature of the program; the availability of premise level load data; and the relative strength of M&V methods. GreenCo commented that member cooperatives have deployed automated metering infrastructure, and a random sample of premise level load data from these devices could be analyzed to measure the impact on energy use from DSM activities. GreenCo said:

These direct measurement methods can be augmented or replaced with techniques that include thermodynamic modeling, conditional demand

analyses, billing analysis, engineering calculations, and market surveys Furthermore ... resources such as EPRI, DOE, CRN and the body of M&V literature from other states can serve as cost effective and reliable resources for estimating energy conservation associated with DSM programs.

The Public Staff proposed that electric power suppliers should use standard, well-established and widely accepted protocols whenever possible, citing the International Performance M&V Protocols.

Discussion and Conclusions Regarding Issue 3

G.S. 62-133.8(c)(2)(b) states that an EMC or municipal power supplier may comply with REPS by, among other things, reducing energy consumption through the implementation of DSM. G.S. 62-133.8(a)(2) defines DSM as "activities, programs, or initiatives undertaken by an electric power supplier or its customers to shift the timing of electricity use from peak to nonpeak demand periods." The first statute refers to electricity use reductions, while the second refers to shifts in the timing of electricity use. Therefore, the Commission concludes that it is necessary to clarify how energy savings from DSM programs are to be calculated. NCSEA and the Environmental Intervenors, as well as several other parties, acknowledged the potential for over-counting DSM energy savings if the energy usage that was subsequently shifted into the non-peak demand periods is not accounted for. The Commission agrees and therefore concludes that the energy consumption that is shifted into non-peak periods must be netted against (subtracted from) the energy savings achieved by DSM during peak periods. In addition, there are situations in which customers participate in DSM programs by switching to an alternate energy source, such as an on-site backup generator or a battery, during peak periods. The Commission finds that in these situations, "reduced energy consumption" did not actually occur, and electric power suppliers must, therefore, reduce their reported DSM energy savings accordingly.

In regard to the M&V protocols to be used for DSM programs, the Commission agrees with the Public Staff and other parties that stated that EMCs and municipal power suppliers should use standard, well-established and widely accepted M&V protocols for DSM programs. Small electric power suppliers whose incremental DSM spending is limited by the REPS cost cap should develop and implement an M&V plan that, at a minimum, includes:

1) A reliable accounting of the number of participants/installations participating in the DSM program;

2) An exact count of the number of times the DSM program was activated, and the length of time of each activation;

3) A reasonably sound and conservative estimate of the capacity reduction achieved and the amount of energy saved per DSM activation,

with adjustments for (a) estimates of energy use that was shifted into non-peak periods; (b) estimates of energy use that was provided by alternative sources during the DSM activation period; and (3) estimates of the number of installations that opted out or otherwise failed to activate for whatever reason during the DSM activation; and

4) If possible, documentation of the electric power supplier's load shape on each day of the DSM program's activation.

Issue 4: Should EMCs be required to include an M&V reporting plan in their EE/DSM program applications similar to the plan required of electric public utilities pursuant to Rule R8-68(c)(3)(ii)?

GreenCo stated that it would oppose being required to submit M&V plans with its EE/DSM program applications, and stated that:

GreenCo requests that the Commission allow EMCs adequate time to assess program viability and to determine how best and cost-effectively to develop an M&V strategy. ... GreenCo questions what problem would truly be resolved by this proposed rule change. ... Greenco is well aware that it must measure and verify EE RECs before using them for compliance purposes and has itself proposed a timetable that gives the Commission (and Public Staff) adequate time to assess M&V methodologies

The Environmental Intervenors recommended that EMCs should be required to file such plans, but that it may be appropriate for the Commission to accept such plans in a different manner or frequency than with the program applications.

The Public Staff maintained that the inclusion of M&V reporting plans in program applications for EMCs would facilitate the determination of energy savings from those programs for REPS compliance. Similarly, NCSEA supported a requirement that EMCs file M&V plans with their program applications, stating that "this will give the Commission the opportunity to verify that appropriate M&V will be used in the project."

Discussion and Conclusions Regarding Issue 4

The Commission has carefully considered the comments of the parties. The Commission agrees with the Public Staff that there are advantages to including M&V plans in a program application, and that this approach is preferable. However, the Commission appreciates that EMCs might want to forego the cost to develop an M&V plan for a program that might not secure Commission approval. Given that the Commission has concluded that it is necessary for EMCs and municipal power suppliers to include M&V plans in their annual REPS compliance plans, it will allow, but not require, EMCs to submit M&V plans with their new EE/DSM program applications.

Other Issues Raised by Parties

Issue 5: Whether to establish an M&V advisory group and require electric power suppliers to jointly select a third-party auditor.

The Environmental Intervenors suggested that the Commission should establish an advisory group process in which utilities and stakeholders could meet informally to ensure that M&V is conducted and documented in a "transparent, reliable and consistent manner." Similarly, Fayetteville proposed that the Commission direct the electric power suppliers to participate in a working group to address common programs and identify appropriate measurement methods and to nominate one or more third-party auditors for approval by the Commission to conduct audits. NCSEA commented that M&V should be conducted by a third-party state-wide evaluator appointed by the Commission to advance the credibility of the program. In their reply comments the Environmental Intervenors supported Fayetteville's recommendation to establish an M&V working group, and stated that such a working group should include customer groups and other stakeholders.

In their reply comments, the IOUs opposed the creation of an M&V working group, stating that the creation of a multi-utility advisory approach would "add a step to the process, slow the effort, and add unnecessary administrative, management and oversight costs without guarantee of benefit." They stated that "such a proposal fails to take into account the myriad of different DSM/EE programs offered by electric utilities, or the stages and phases of their implementation."

With respect to the use of one state-wide auditor for all electric power suppliers' EE/DSM programs, the IOUs noted that many electric power suppliers have already contracted with independent third-party contractors for M&V services. "The advisory group process proposed by [the Environmental Intervenors] would, by definition, serve to 'advise' the third-party contractors, thereby lessening the desired independence and possibly duplicating some of the activities of the EM&V contractor."

Discussion and Conclusions Regarding Issue 5

After careful consideration of the parties' comments, the Commission finds and concludes that it is not necessary at this time to require the creation of an M&V advisory group or the use of one state-wide EE/DSM auditor. Some electric public utilities have already established stakeholder processes for their EE and DSM programs. For example, in the proceeding that established Duke's "Save-a-Watt" approach to EE/DSM cost recovery and incentives, the Commission approved a settlement agreement that provided for the creation of an advisory group, the purpose of which includes review of Duke's M&V process.³ The Commission agrees with the IOUs that, for their organizations, the creation of a multi-utility advisory approach would "add a step to the process, slow the effort, and add unnecessary administrative, management and oversight costs without guarantee of benefit."

³See the Commission's February 9, 2010 Order in Docket No. E-7, Sub 831.

However, the Commission is of the opinion that for EMCs and municipal power suppliers it is possible that an advisory group approach would have merit. Such electric power suppliers could share information regarding M&V for similar programs and perhaps collaborate in contracting for M&V services.⁴ However, the Commission acknowledges that each electric power supplier's circumstances are unique as regards the maturity of its EE/DSM efforts, the M&V experience of its personnel, and the funding that it should expend toward M&V. Therefore, the Commission encourages EMCs and municipal power suppliers to collaborate on M&V activities to the extent that such collaboration is efficient, but will decline to require the creation of an M&V advisory group at this time.

Similarly, the Commission will also decline to require the use of one state-wide EE/DSM program auditor. As stated in the IOUs' reply comments, many electric power suppliers routinely contract with independent third-party contractors for M&V services. Requiring another third-party "auditor" at this time would be disruptive and of limited additional benefit to assure the integrity of the IOUs' reported EE results. Some EMCs and municipal power suppliers might benefit from such an auditor, but it is not clear to the Commission that the REPS spending caps would always be sufficient to allow such an expenditure. Therefore, the Commission finds and concludes that it is not appropriate at this time to secure a third-party auditor to review all of the M&V activities of the State's electric power suppliers.

IT IS, THEREFORE, ORDERED as follows:

1. That the revised rules as shown in Appendices A and B attached hereto shall be effective immediately;

2. That NCMPA1, Halifax, and GreenCo shall revise the number of EECs reported in their 2008 REPS compliance reports as necessary, consistent with this Order; develop supporting work papers or testimony; and file the information with their 2011 REPS compliance reports on or before September 3, 2012;

3. That all electric power suppliers shall review the number of EECs that they have reported to date and submit any changes that might be necessitated by this Order, along with supporting verified work papers or testimony, with their 2011 REPS compliance reports; and

⁴The Commission notes that such an approach is already being pursued by GreenCo on behalf of its participating EMCs.

4. That the Chief Clerk shall mail a copy of this Order to all electric power suppliers that serve customers within the State of North Carolina.

ISSUED BY ORDER OF THE COMMISSION.

This the <u>14th</u> day of May, 2012.

NORTH CAROLINA UTILITIES COMMISSION

Patricia Swenson

Patricia Swenson, Deputy Clerk

mr051412.02

Amendments to Commission Rules With Changes Black-Lined

R8-67(b) REPS compliance plan.

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

(iii) a list of <u>those planned or implemented energy efficiency and</u> <u>demand side management measures that the electric power supplier</u> <u>plans to use toward REPS compliance</u>, including a brief description of the <u>each measure, its</u> and projected impacts, <u>and a measurement and</u> <u>verification plan if such plan has not otherwise been filed with the</u> <u>Commission</u>;

R8-67(c) REPS compliance report.

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

(ix) for electric membership corporations and municipal electric suppliers, reduced energy consumption achieved in each year after January 1, 2008, through the implementation of <u>energy efficiency or a</u> demand-side management programs, along with the results of each program's measurement and verification plan, or other documentation supporting an estimate of the program's energy reductions achieved in the previous year pending implementation of a measurement and verification plan. Supporting documentation shall be retained and made available for audit.

R8-67(h) N

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

(10) Each electric power supplier that complies with G.S. 62-133.8 by implementing energy efficiency or demand-side management programs shall use NC-RETS to report the estimated and verified energy savings of those programs. Municipal power suppliers and electric membership corporations may elect to have their estimated and verified energy savings from their energy efficiency and

demand-side management programs reported to NC-RETS by a utility compliance aggregator, and to have their reported savings consolidated with the reported savings from other municipal power suppliers or electric membership corporations if and as necessary to permit aggregate reporting through their utility compliance aggregator. Records regarding which electric power supplier achieved the energy efficiency and demand-side management, the programs that were used, and the year in which it was achieved, shall be retained for audit.

Changes to Commission Rules With Changes Accepted

R8-67(b) REPS compliance plan.

. . .

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

(iii) a list of those planned or implemented energy efficiency and demand side management measures that the electric power supplier plans to use toward REPS compliance, including a brief description of each measure, its projected impacts, and a measurement and verification plan if such plan has not otherwise been filed with the Commission;

R8-67(c) REPS compliance report.

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

...

(ix) for electric membership corporations and municipal electric suppliers, reduced energy consumption achieved in each year after January 1, 2008, through the implementation of energy efficiency or demand-side management programs, along with the results of each program's measurement and verification plan, or other documentation supporting an estimate of the program's energy reductions achieved in the previous year pending implementation of a measurement and verification plan. Supporting documentation shall be retained and made available for audit.

R8-67(h) North Carolina Renewable Energy Certificate Tracking System (NC-RETS)

(10) Each electric power supplier that complies with G.S. 62-133.8 by implementing energy efficiency or demand-side management programs shall use NC-RETS to report the energy savings of those programs. Municipal power suppliers and electric membership corporations may elect to have their energy savings from their energy efficiency and demand-side management programs reported to NC-RETS by a utility compliance aggregator, and to have their

reported savings consolidated with the reported savings from other municipal power suppliers or electric membership corporations if and as necessary to permit aggregate reporting through their utility compliance aggregator. Records regarding which electric power supplier achieved the energy efficiency and demand-side management, the programs that were used, and the year in which it was achieved, shall be retained for audit.

STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. E-100, SUB 134

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of Filing Requirements for New Electric Generators

) ORDER AMENDING RULES R8-61, R8-63,) AND R8-64

BY THE COMMISSION: In order to facilitate more efficient review by government agencies and the general public of the potential environmental impacts of proposed new electric generation facilities, the Commission finds good cause to: (1) amend Commission Rules R8-61, R8-63, and R8-64, as shown in the attached Appendix A, effective September 1, 2012; and (2) require the Chief Clerk to serve copies of this Order on all North Carolina electric power suppliers, the Clearinghouse Coordinator of the Office of Policy and Planning of the Department of Administration, and all parties to Docket No. E-100, Sub 113.

IT IS, THEREFORE, SO ORDERED.

ISSUED BY ORDER OF THE COMMISSION.

This the $\underline{30^{\text{th}}}$ day of July, 2012.

NORTH CAROLINA UTILITIES COMMISSION

Hail L. Mount

Gail L. Mount, Chief Clerk

mr073012.01

Rule R8-61. PRELIMINARY PLANS AND CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY FOR CONSTRUCTION OF ELECTRIC GENERATION AND RELATED TRANSMISSION FACILITIES IN NORTH CAROLINA; CONSTRUCTION OF OUT-OF-STATE ELECTRIC GENERATING FACILITIES; PROGRESS REPORTS AND ONGOING REVIEWS OF CONSTRUCTION; PROJECT DEVELOPMENT COST REVIEWS FOR NUCLEAR GENERATING FACILITIES.

(a) Information to be filed 120 or more days before the filing of an application, by a public utility or other person, for a certificate of public convenience and necessity for generating facilities with capacity of 300 MW or more shall include the following:

(1) Available site information (including maps and description), preliminary estimates of initial and ultimate development, a <u>drawing showing the</u> proposed site layout relative to the map, with all major equipment, including the generator, fuel handling equipment, plant distribution system, startup equipment, site boundary, planned and existing pipelines, planned and existing roads, planned and existing water supplies, and planned and existing electric facilities;

(2) justification for the adoption of the site selected, and general information describing the other locations considered;

(23) As appropriate, preliminary information concerning geological, aesthetic, ecological, meteorological, seismic, water supply, population and general load center data to the extent known;

(<u>34</u>) A statement of the need for the facility, including information on loads and generating capability;

(45) A description of investigations completed, in progress, or proposed involving the subject site;

(56) A statement of existing or proposed plans known to the applicant of federal, state, local governmental and private entities for other developments at or adjacent to the proposed site;

(67) A statement of existing or proposed environmental evaluation programs to meet the applicable air and water quality standards;

(78) A brief general description of practicable transmission line routes emanating from the site;

(8<u>9</u>) A list of all agencies from which approvals will be sought covering various aspects of any generation facility constructed on the site and the title and nature of such approvals;

(910) A statement of estimated cost information, including plans and related transmission capital cost (initial core costs for nuclear units); all operating expenses by categories, including fuel costs and total generating cost per net kWh at plant; and information concerning capacity factor, heat rate, and plant

service life. Furnish comparative cost including related transmission cost of other final alternatives considered; and

(10<u>11</u>) A schedule showing the anticipated beginning dates for construction, testing, and commercial operation of the generating facility.

(b) In filing an application for a certificate of public convenience and necessity pursuant to G.S. 62-110.1(a) in order to construct a generating facility in North Carolina, a public utility shall include the following information supported by relevant testimony:

(1) The most recent biennial report and the most recent annual report (as defined in Rule R8-60) of the utility plus any proposals by the utility to update said report;

(2) The extent to which the proposed construction conforms to the utility's most recent biennial report and the most recent annual report (as defined in Rule R8-60);

(3) Support for any utility proposals to update its most recent biennial report and its most recent annual report (as defined in Rule R8-60);

(4) Updates, if any, to the Rule R8-61(a) information;

(5) An estimate of the construction costs for the generating facility;

(6) The projected cost of each major component of the generating facility and the projected schedule for incurring those costs;

(7) The projected effect of investment in the generating facility on the utility's overall revenue requirement for each year during the construction period;

(8) The anticipated construction schedule for the generating facility;

(9) The specific type of units selected for the generating facility; the suppliers of the major components of the facility; the basis for selecting the type of units, major components, and suppliers; and the adequacy of fuel supply;

(10) The qualifications and selection of principal contractors and suppliers for construction of the generating facility, other than those listed in Item (9) above;

(11) Resource and fuel diversity and reasonably anticipated future operating costs, including the anticipated in-service expenses associated with the generating facility for the 12-month period of time following commencement of commercial operation of the facility;

(12) Risk factors related to the construction and operation of the generating facility; and

(13) If the application is for a coal or nuclear generating facility, information demonstrating that energy efficiency measures; demand-side management; renewable energy resource generation; combined heat and power generation; or any combination thereof, would not establish or maintain a more cost-effective and reliable generation system and that the construction and operation of the facility is in the public interest.

(c) The public utility shall submit a progress report and any revision in the construction cost estimate during each year of construction according to a schedule established by the Commission.

(d) Upon the request of the public utility or upon the Commission's own motion, the Commission may conduct an ongoing review of construction of the generating facility as the construction proceeds.

(e) A public utility requesting an ongoing review of construction of the generating facility pursuant to G.S. 62-110.1(f) shall file an application, supported by relevant testimony, for an ongoing review no later than 12 months after the date of issuance of a certificate of public convenience and necessity by the Commission; provided, however, that the public utility may, prior to the conclusion of such 12-month period, petition the Commission for a reasonable extension of time to file an application based on a showing of good cause. Upon the filing of a request for an ongoing review, the Commission shall establish a schedule of hearings. The hearings shall be held no more often than every 12 months. The Commission shall also establish the time period to be reviewed during each hearing. The purpose of each ongoing review hearing is to determine the reasonableness and prudence of the costs incurred by the public utility during the period under review and to determine whether the certificate should remain in effect or be modified or revoked. The public utility shall have the burden of proof to demonstrate that all costs incurred are reasonable and prudent.

(f) A public utility may file an application pursuant to G.S. 62-110.6 requesting the Commission to determine the need for an out-of-state electric generating facility that is intended to serve retail customers in North Carolina. If need for the generating facility is established, the Commission shall also approve an estimate of the construction costs and construction schedule for such facility. The application may be filed at any time after an application for a certificate of public convenience and necessity or license for construction of the generating facility has been filed in the state in which the facility will be sited. The application shall be supported by relevant testimony and shall include the information required by subsection (b) of this Rule to the extent such information is relevant to the showing of need for the generating facility and the estimated construction costs and proposed construction schedule for the generating facility. The public utility shall submit a progress report and any revision in the construction cost estimate for the out-of-state electric generating facility during each year of construction according to a schedule established by the Commission.

(g) If the Commission makes a determination of need pursuant to G.S. 62-110.6 and subsection (f) of this Rule, the provisions of subsections (d) and (e) of this Rule shall apply to a request by a public utility for an ongoing review of construction of a generating facility to be constructed in another state that is intended to serve retail customers in North Carolina. An electric public utility shall file an application, supported by relevant testimony, for an ongoing review no later than 12 months after the date of issuance of a certificate of public convenience and necessity or license by the state commission in which the out-of-state generating facility is to be constructed;

provided, however, that the public utility may, prior to the conclusion of such 12-month period, petition the Commission for a reasonable extension of time to file an application based on a showing of good cause.

(h) A public utility may file an application pursuant to G.S. 62-110.7 requesting the Commission to review the public utility's decision to incur project development costs for a potential in-state or out-of-state nuclear generating facility that is intended to serve retail electric customers in North Carolina. The application, supported by relevant testimony, shall be filed prior to the filing of an application for a certificate to construct the facility.

Rule R8-63. Application for certificate of public convenience and necessity for merchant plant; progress reports.

- (a) Scope of Rule.
 - (1) This rule applies to an application for a certificate of public convenience and necessity pursuant to G.S. 62-110.1(a) by any person seeking to construct a merchant plant in North Carolina.
 - (2) For purposes of this rule, the term "merchant plant" means an electric generating facility, other than one that qualifies for and seeks the benefits of 16 U.S.C.A. 824a-3 or G.S. 62-156, the output of which will be sold exclusively at wholesale and the construction cost of which does not qualify for inclusion in, and would not be considered in a future determination of, the rate base of a public utility pursuant to G.S. 62-133.
 - (3) Persons filing under this rule are not subject to the requirements of Rule R1-37 or Rule R8-61.
- (b) Application.
 - (1) The application shall contain all of the information hereinafter required, with each item labeled as set out below. Any additional information may be included at the end of the application.
 - (A) The Applicant:
 - (i) The full and correct name, business address, and business telephone number of the applicant;
 - (ii) A description of the applicant, including the identities of its principal participant(s) and officers, and the name and business address of a person authorized to act as corporate agent or to whom correspondence should be directed; and
 - (iii) A copy of the applicant's most recent annual report to stockholders, which may be attached as an exhibit, or, if the applicant is not publicly traded, its most recent balance sheet and income statement. If the applicant is a newly formed entity with little history, this information should be provided for its parent company, equity partner, and/or the other participant(s) in the project.

- (B) The Facility:
 - The nature of the proposed generating facility, including its type, fuel, size, and expected service life; the anticipated beginning date for construction; the expected commercial operation date; and estimated construction costs;
 - (ii) A detailed description of the location of the generating facility, including a map with the location marked;
 - (iii) <u>A drawing showing Tthe</u> proposed site layout <u>relative to the</u> <u>map provided pursuant to (B)(ii), with of all major equipment,</u> and a diagram showing <u>including</u> the generator, <u>fuel</u> <u>handling equipment</u>, plant distribution system, startup equipment, <u>site boundary</u>, planned and existing pipelines, <u>planned and existing roads</u>, planned and existing water <u>supplies</u>, and provisions for planned and existing electric transmission <u>facilities</u> interconnection;
 - (iv) In the case of natural gas-fired facilities, a map showing the proximity of the facility to existing natural gas facilities; a description of dedicated facilities to be constructed to serve the facility; and any filed agreements, service contracts, or tariffs for interstate pipeline capacity;
 - (v) A list of all needed federal, state, and local approvals related to the facility and site, identified by title and the nature of the needed approval; a copy of such approvals or a report of their status; and a copy of any application related to eligible facility and/or exempt wholesale generator status pursuant to Section 32 of the Public Utility Holding Company Act of 1935 (PUHCA), as amended by the Energy Policy Act of 1992, including attachments and subsequent amendments, if any;
 - (vi) A general description of the transmission facilities to which the facility will have access or the necessity of acquiring rights-of-way for new facilities; and
 - (vii) Information about generating facilities in the Southeastern Electric Reliability Council region which the applicant or an affiliate has any ownership interest in and/or the ability to control through leases, contracts, options, and/or other arrangements and information about certificates that have been granted for any such facilities not yet constructed.
- (C) Statement of Need: A description of the need for the facility in the state and/or region, with supporting documentation.
- (2) The application shall be signed and verified by the applicant or by an individual duly authorized to act on behalf of the applicant.
- (3) The application shall be accompanied by prefiled direct testimony incorporating and supporting the application.
- (4) The Chief Clerk will deliver ten (10) copies of the application to the Clearinghouse coordinator in the Department of Administration for

distribution to State agencies having an interest in the proposed generating facility.

(5) Contemporaneous with the filing of the application with the Commission, all applicants proposing a generating facility that will use natural gas must provide written notice of the filing to the natural gas local distribution company or municipal gas system providing service or franchised to provide service at the location of the proposed generating facility.

(c) Confidential Information. If an applicant considers certain of the required information to be confidential and entitled to protection from public disclosure, it may designate said information as confidential and file it under seal. Documents marked as confidential will be treated pursuant to applicable Commission rules, procedures, and orders dealing with filings made under seal and with nondisclosure agreements.

(d) Procedure upon Receipt of Application. No later than ten (10) business days after the application is filed with the Commission, the Public Staff shall, and any other party in interest may, file with the Commission and serve upon the applicant a notice regarding whether the application is complete and identifying any deficiencies. If the Commission determines that the application is not complete, the applicant will be required to file the missing information. Upon receipt of all required information, the Commission will promptly issue a procedural order setting the matter for hearing, requiring public notice, and dealing with other procedural matters.

(e) The Certificate.

- (1) The certificate shall specify the name and address of the certificate holder; the type, size, and location of the facility; and the conditions, if any, upon which the certificate is granted.
- (2) The certificate shall be subject to revocation if (a) any of the federal, state, or local licenses or permits required for construction and operation of the generating facility is not obtained or, having been obtained, is revoked pursuant to a final, non-appealable order; (b) required reports or fees are not filed with or paid to the Commission; and/or (c) the Commission concludes that the certificate holder filed with the Commission information of a material nature that was inaccurate and/or misleading at the time it was filed; provided that, prior to revocation pursuant to any of the foregoing provisions, the certificate holder shall be given thirty (30) days' written notice and opportunity to cure.
- (3) The certificate must be renewed if the applicant does not begin construction within two years after the date of the Commission order granting the certificate.
- (4) A certificate holder must notify the Commission in writing of any plans to sell, transfer, or assign the certificate and the generating facility.

(f) Reporting. All applicants must submit annual progress reports and any revisions in cost estimates, as required by G.S. 62-110.1(f) until construction is completed.

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

(a) Scope of Rule.

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

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

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

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

(b) The Application.

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

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

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

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

(iv) The location of the generating facility set forth in terms of local highways, streets, rivers, streams, or other generally known local

landmarks together with a map, such as a county road map, with the location indicated on the map; and a drawing showing: (1) the proposed site layout relative to the map; (2) all major equipment, including the generator, fuel handling equipment, plant distribution system, and startup equipment; (3) the site boundary; and (4) planned and existing pipelines, planned and existing roads, planned and existing water supplies, and planned and existing electric facilities;

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

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

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

(viii) The projected cost of the facility;

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

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

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

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

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

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

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

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

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

(vi) An economic feasibility study of the project;

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

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

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

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

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

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

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

(6) The application and 12 copies shall be filed with the Chief Clerk of the Utilities Commission.

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

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

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

(3) If a complaint is received within 10 days after the last date of the publication of the notice, the Commission will schedule a public hearing to determine whether a certificate should be awarded and will give reasonable notice of the time and place of the hearing to the applicant and to each complaining party and will require the applicant to publish notice of the hearing in the newspaper in which the notice of the application was published. If no complaint is received within the time specified, the Commission may, upon its own initiative, order and schedule a hearing to determine whether a certificate should be awarded and, if the Commission orders a hearing upon its own initiative, it will require notice of the hearing to be published by the applicant in the newspaper in which the notice of the application was published.

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

(d) The Certificate.

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

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

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

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

APPENDIX 3

STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. RET-11, SUB 0 DOCKET NO. RET-12, SUB 0 DOCKET NO. RET-13, SUB 0 DOCKET NO. RET-14, SUB 0 DOCKET NO. RET-15, SUB 0 DOCKET NO. RET-16, SUB 0 DOCKET NO. RET-17, SUB 0 DOCKET NO. RET-18, SUB 0

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. RET-11, SUB 0
In the Matter of () Application of Camp Rockmont for Boys for () Registration of a New Renewable Energy Facility ()
DOCKET NO. RET-12, SUB 0
In the Matter of () Application of Guilford College for Registration of () a New Renewable Energy Facility ()
DOCKET NO. RET-13, SUB 0
In the Matter of) Application of Green Sage Coffeehouse and) Café for Registration of a New Renewable Energy) Facility
DOCKET NO. RET-14, SUB 0
In the Matter of) Application of The Market Place Restaurant for) Registration of a New Renewable Energy Facility)
DOCKET NO. RET-15, SUB 0
In the Matter of) Application of Pisgah Inn for Registration of a New) Renewable Energy Facility)

ORDER ACCEPTING REGISTRATION OF NEW RENEWABLE ENERGY FACILITIES AND RULING ON REQUESTS FOR WAIVERS

DOCKET NO. RET-16, SUB 0)
In the Matter of Application of Kanuga Conferences, Inc., for Registration of a New Renewable Energy Facility))))
DOCKET NO. RET-17, SUB 0)
In the Matter of Application of Biowheels for Registration of a New Renewable Energy Facility))))
DOCKET NO. RET-18, SUB 0)
In the Matter of Application of West End Bakery for Registration of a New Renewable Energy Facility))))
DOCKET NO. RET-19, SUB 0)
In the Matter of Application of Mighty Good Eats, LLC, for Registration of a New Renewable Energy Facility)))

BY THE CHAIRMAN: From February 8, 2010, through June 21, 2010, FLS Energy, Inc., and FLS YK Farm, LLC (collectively, FLS), filed registration statements pursuant to Commission Rule R8-66 in the above-captioned dockets on behalf of Camp Rockmont for Boys, Guilford College, Green Sage Coffeehouse and Café, The Market Place Restaurant, Pisgah Inn, Kanuga Conferences, Inc., Biowheels, West End Bakery and Mighty Good Eats, LLC (Applicants), for new solar thermal renewable energy facilities located in North Carolina. Each registration statement designated FLS as the aggregator of renewable energy certificates (RECs) and stated that all RECs produced at the facilities would be sold to Duke Energy Carolinas, LLC (Duke). In addition, the registration statements stated that it was economically impractical to install monitoring systems at these small facilities. Thus, FLS proposed the use of RETScreen Analysis Software (RETScreen) to calculate the estimated solar thermal production of each facility.

On March 9, 2010, the Public Staff filed the recommendation required by Commission Rule R8-66(e) for each of the above-captioned registration statements, except in Docket Nos. RET-18, Sub 0 and RET-19 Sub 0, in which the Public Staff filed recommendation letters on a later date. In its March 9, 2010 letters, the Public Staff recommended that the registrations be considered incomplete, noting the following concerns: (1) that there was not adequate documentation for the Applicants' claim that metering of these facilities was economically impracticable, and (2) the need to document each facility owner's transfer of RECs to FLS in order for FLS to sell the RECs to Duke.

On March 26, 2010, FLS filed its response to the Public Staff's recommendation. FLS stated, among other things, that it would be economically impracticable to monitor a system generating less than 45,000 kWh or BTU equivalent per year because the resulting payback period for the equipment would exceed the period of depreciation. Additionally, FLS stated that the use of the RETScreen modeling software meets or exceeds industry-accepted methods for estimating solar thermal production. Further, FLS stated that the RETScreen modeling software was the industry's leading modeling software.

On August 4, 2010, the Public Staff filed a letter acknowledging the information filed by FLS on March 26, 2010, and recommending that the registration statements be considered complete and the facilities be considered new renewable energy facilities. However, the Public Staff recommended that these unmetered solar thermal facilities be allowed to earn RECs only for the general renewable energy requirement established pursuant to G.S. 62-133.8(b) and (c), not for the solar set-aside requirement under G.S. 62-133.8(d).

On December 8, 2010, FLS filed a letter requesting that, "up through December 3, 2010," the Commission allow modeled unmetered small solar thermal facilities to earn RECs to be used toward the solar set-aside requirement. Among other things, FLS quoted a portion of Commission Rule R8-67(g)(4) and stated that FLS's prior understanding was that RECs earned at unmetered small solar thermal facilities can count toward the solar set-aside. In addition, FLS stated that, based on its prior understanding and other factors discussed in its March 26, 2010 filing, FLS did not install meters at these facilities, but instead utilized RETScreen, which FLS considers an industry-accepted means to calculate solar thermal energy production. FLS further stated: "FLS Energy is very supportive of recent indications from the NCUC that all solar thermal systems should be monitored to count for the solar set aside. However, this would be a change of policy." Finally, FLS stated that it would install metering for all of its commercial solar thermal facilities, both large and small, in the future.

On January 6, 2011, the Public Staff filed a reply to FLS's December 8, 2010 letter. After reciting the main points in FLS's letter, the Public Staff asserted that the issues raised by FLS were previously addressed in the Commission's July 21, 2010 Order in Docket No. RET-10, Sub 0. Citing the language in G.S. 62-133.8(d) that the solar set-aside requirement must be met through "a combination of new solar electric facilities and new metered solar thermal energy facilities" and the Commission's Order in Docket No. RET-10, Sub 0, the Public Staff stated that RECs produced at an unmetered solar thermal facility qualify for the general renewable energy requirement in G.S. 62-133.8(b) and (c), but not for the solar set-aside requirement in G.S. 62-133.8(d). In addition, the Public Staff stated that it was unaware of any valid basis upon which the Commission could waive the statutory requirement. Thus, the Public Staff recommended that the RECs earned by FLS prior to the installation of meters at these facilities be eligible for meeting the general requirement of G.S. 62-133.8(b) and (c), but not for meeting the solar set-aside requirement.

On March 16, 2011, FLS notified the Commission that the metering of these facilities has been completed.

On August 26, 2011, the Public Staff filed the recommendation required by Commission Rule R8-66(e) in Docket Nos. RET-18, Sub 0 and RET-19 Sub 0 recommending that the registration statements be considered complete and the facilities be considered new renewable energy facilities.

In each of these dockets, FLS and the Applicants filed certified attestations that: 1) the facilities are 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 facilities will be operated as new renewable energy facilities; 3) FLS will not remarket or otherwise resell any RECs sold to an electric power supplier to comply with G.S. 62-133.8; and 4) FLS will consent to the auditing of its books and records by the Public Staff insofar as those records relate to transactions with North Carolina electric power suppliers.

No other party made a filing in these dockets.

Based upon the foregoing and the entire record in these proceedings, the Chairman finds good cause to accept registration of the metered solar thermal facilities as new renewable energy facilities. FLS shall annually file on behalf of the Applicants the information required by Commission Rule R8-66 on or before April 1 of each year. FLS will be required to participate in the NC-RETS REC tracking system (http://www.ncrets.org) in order to facilitate the issuance of RECs.

However, after careful consideration of the filings in these dockets, as well as the applicable statutes, Commission rules and precedent, the Chairman is of the opinion that good cause does not exist to grant FLS's 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 that are eligible to meet the solar set-aside requirement under that statute. The requirement that solar thermal energy be measured by a meter is not new, but was included in the statute when G.S. 62-133.8 was enacted in 2007. Further, FLS has not cited, and the Chairman has not found, any legal authority by which the Commission is authorized to grant a waiver of this requirement.

In addition, the Chairman is of the opinion that FLS's use of RETScreen as the means to determine the RECs earned for the unmetered solar thermal energy produced by these facilities is not appropriate. The RETScreen model will likely overestimate the number of RECs earned because it estimates the total amount of solar thermal energy that could be produced by the panels, not the amount of energy actually used to heat water. Rather, the meter data now being read should be used as a more accurate approximation of the actual usage during the same month in prior years. Thus, the Commission will allow FLS to estimate usage and earn RECs for a facility for months prior to the installation of the meter equal to the usage and RECs earned during the same calendar month initially following installation of the meter for that facility.¹ As stated above, however, only the RECs earned after the installation of the meter are

¹ For example, if a facility was placed into service in August 2008 and its meter was installed in December 2010, FLS should use the meter reading in January 2011 to estimate the usage in January 2009 and January 2010, the meter reading in February 2011 to estimate the usage in February 2009 and February 2010, and so forth through December 2011 to estimate all historic solar thermal energy usage.

eligible to meet the solar set-aside requirement of G.S. 62-133.8(d); the RECs earned prior to installation of the meter may be used only to meet the general renewable energy requirement established pursuant to G.S. 62-133.8(b) and (c).

Finally, the Chairman notes that all of these facilities, except those in Docket Nos. RET-18, Sub 0 and RET-19 Sub 0, began operation in 2008. Based on the Commission's December 10, 2010 Order in Docket No. E-100, Sub 113, RECs for historic renewable energy production are allowed to be earned only for renewable energy production up to two years prior to the date it is reported. However, the Commission has endeavored to ensure that all facilities have an adequate opportunity to register with the Commission and with NC-RETS and to have their historic renewable energy production receive appropriate RECs. Therefore, because FLS initially filed its registration statements for these facilities in 2010, prior to the deadline for reporting all historic renewable energy production, the Chairman is of the opinion that good cause exists to grant FLS a waiver of the two-year limitation and to allow FLS to earn RECs based on the solar thermal energy production of these facilities from the date of operation of each of these facilities.

IT IS, THEREFORE, ORDERED as follows:

1. That the registrations of the metered solar thermal facilities in the abovecaptioned dockets as new renewable energy facilities shall be, and are hereby, accepted.

2. That FLS shall annually file on behalf of the Applicants the information required by Commission Rule R8-66 on or before April 1 of each year for each of these facilities.

3. That FLS's 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 earn RECs that are eligible to meet the solar set-aside requirement under that statute shall be, and is hereby, denied.

4. That FLS's request to use RETScreen for the measurement of unmetered solar thermal energy produced by these facilities shall be, and is hereby, denied.

5. That FLS shall be allowed to earn RECs eligible to meet the requirements of G.S. 62-133.8(b) and (c) for months prior to the installation of a facility's meter equal to the number of RECs earned during the same calendar month initially following installation of the meter for that facility.

6. That FLS shall be, and is hereby, granted a waiver of the two-year limitation on earning RECs for historic renewable energy production. FLS shall be entitled to receive RECs for all appropriately documented solar thermal energy produced at these facilities since their initial dates of operation.

ISSUED BY ORDER OF THE COMMISSION.

This the $\underline{21^{st}}$ day of October, 2011.

NORTH CAROLINA UTILITIES COMMISSION

Aail L. Mount

Gail L. Mount, Deputy Clerk

Bh102011.01

STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. RET-28, SUB 0

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of Application of Snowflake Holdings, Inc., for Registration of a New Renewable Energy Facility

ORDER DENYING REGISTRATION
OF NEW RENEWABLE ENERGY
FACILITY

BY THE COMMISSION: On September 26, 2011. as amended November 21, 2011, Snowflake Holdings, Inc. (Snowflake), filed a registration statement pursuant to Commission Rule R8-66 for a new renewable energy facility to be located in Snowflake, Arizona. Snowflake's registration statement described its facility as a concentrated solar power (CSP) thermal system, consisting of 3,120 parabolic troughs serving as a pre-heat augmentation system for boiler feed water. Snowflake stated that the CSP thermal system would be integrated into an existing 27-MW_{AC} biomass facility which is currently utilizing wood chips and wood sludge as its fuel source for electric generation. Snowflake further stated that the thermal output of the CSP system would be metered and that the system is expected to become operational on or around fourth quarter 2012.

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) Snowflake 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) Snowflake 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 November 22, 2011, the Public Staff filed the recommendation required by Commission Rule R8-66(e) stating that Snowflake's registration statement as a new renewable energy facility should be considered to be complete. No other party made a filing with respect to these issues.

After careful consideration, the Commission finds good cause to deny the registration of Snowflake's metered CSP thermal system as a new renewable energy facility. Specifically, Commission Rule R8-67(g)(4) states, in part: "Thermal energy produced by a combined heat and power system or solar thermal energy facility shall be the thermal energy recovered and used for useful purposes other than electric power production." Based upon the integration of the proposed CSP thermal system into the existing biomass facility, the thermal energy generated from the proposed CSP thermal

system will be used to generate electricity. By using the energy from the CSP thermal system to pre-heat the feed water entering the biomass-fueled boiler, less biomass fuel will be needed to generate electricity at the existing facility. The Commission, therefore, concludes that the proposed CSP thermal system should not be registered separately from the existing biomass generating facility and allowed to earn RECs for the solar thermal output, but rather must be considered as an alternative fuel source for the electric generating facility, which would be considered for registration in the same manner as any other multi-fuel facility.

IT IS, THEREFORE, SO ORDERED:

ISSUED BY ORDER OF THE COMMISSION.

This the 22^{nd} day of December, 2011.

NORTH CAROLINA UTILITIES COMMISSION

Hail L. Mount

Gail L. Mount, Deputy Clerk

Commissioner's William T. Culpepper, III, and Susan W. Rabon, did not participate in this decision.

k2122111.06

STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. EMP-49, SUB 0

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of

Application of Atlantic Wind, LLC, for a CertificateORDER GRANTINGof Public Convenience and Necessity to ConstructCERTIFICATE ANDa 300-Megawatt Wind Facility in Pasquotank andACCEPTING REGISTRATIONPerquimans Counties and Registration as a NewOF NEW RENEWABLERenewable Energy FacilityFACILITY

HEARD: Thursday, March 10, 2011, at 7:00 p.m. in Courtroom B, Pasquotank County Courthouse, 206 East Main Street, Elizabeth City, North Carolina

Tuesday, April 5, 2011, at 9:30 a.m. in Commission Hearing Room 2115, Dobbs Building, 430 North Salisbury Street, Raleigh, North Carolina

BEFORE: Chairman Edward S. Finley, Jr., Presiding, and Commissioners Susan W. Rabon and Lucy T. Allen

APPEARANCES:

For Atlantic Wind, LLC:

Henry C. Campen, Jr., and Katherine E. Ross, Parker Poe Adams & Bernstein LLP, Wachovia Capital Center, 150 Fayetteville Street, Suite 1400, Raleigh, North Carolina 27601

For the North Carolina Sustainable Energy Association:

Kurt J. Olson, Post Office Box 6465, Raleigh, North Carolina 27628

For the Using and Consuming Public:

Dianna Downey, Staff Attorney, Public Staff – North Carolina Utilities Commission, 4326 Mail Service Center, Raleigh, North Carolina 27699-4326

BY THE COMMISSION: On January 27, 2011, Atlantic Wind, LLC (Atlantic Wind), filed an application with the Commission seeking a Certificate of Public Convenience and Necessity (CPCN) pursuant to G.S. 62-110.1(a) and Commission Rule R8-63 to construct a 300-megawatt (MW) wind facility in Pasquotank and

Perquimans Counties, North Carolina. On the same date, Atlantic Wind prefiled the direct testimony of Craig Poff, Scott Winneguth and Trevor Mihalik in support of the application. Atlantic Wind contemporaneously filed its registration as a new renewable energy facility in accordance with Commission Rule R8-66.

On February 7, 2011, the Public Staff filed a Notice of Completeness indicating that Atlantic Wind's application complied with the requirements of Commission Rule R8-63 and recommending that the application be set for hearing. On February 8, 2011, the Commission issued an order setting the application for hearing, requiring Atlantic Wind to provide appropriate public notice, and establishing deadlines for the filing of petitions to intervene, intervenor testimony and rebuttal testimony.

On February 15, 2011, the Public Staff filed the recommendation required by Rule R8-66(e) indicating Atlantic Wind's registration statement was complete and recommending that the facility be considered a new renewable energy facility.

On February 23, 2011, the North Carolina Department of Cultural Resources filed initial comments.

On March 4, 2011, the North Carolina Sustainable Energy Association (NCSEA) filed a petition to intervene, which was granted by the Commission on March 9, 2011.

On March 8, 2011, Atlantic Wind filed the required affidavit of publication.

On March 10, 2011, the Commission conducted a hearing in Elizabeth City as provided in the Commission's February 8, 2011 Order to receive public witness testimony. The following public witnesses appeared and gave testimony at this hearing: Reuben James, Horace Pritchard, Tim Ivey, Manny Madeiros, Vann Rogerson, Wayne Harris, Lewis Smith, Ray Meads and Lloyd Griffin.

On March 14, 2011, the North Carolina Department of Administration filed comments through the State Clearinghouse stating that it had determined that no further State Clearinghouse review action on the part of the Commission was needed for compliance with the North Carolina Environmental Policy Act.

On March 24, 2011, the Public Staff prefiled the testimony of Jay B. Lucas, Electric Engineer with the Public Staff Electric Division, and Calvin C. Craig, III, Financial Analyst with the Public Staff Economic Research Division.

On March 25, 2011, NCSEA filed the testimony of Paul Quinlan, Managing Director, in support of the application.

On March 28, 2011, Atlantic Wind filed supplemental testimony of Craig Poff in support of the application.

On March 31, 2011, Atlantic Wind filed a Motion to Cancel the Evidentiary Hearing scheduled for April 5, 2011. In that motion, Atlantic Wind stated that the parties consented to waiver of cross-examination of all witnesses, stipulation of all prefiled testimony and exhibits in the record, cancellation of the evidentiary hearing and issuance of an order based on the resulting record.

On April 1, 2011, the Commission issued an order cancelling the evidentiary hearing scheduled for April 5, 2011, accepting the prefiled direct testimony and exhibits of the parties' witnesses into the record, and ordering that the parties file proposed orders and briefs on or before May 2, 2011.

On April 5, 2011, the Commission conducted a hearing in Raleigh as provided in the Commission's February 8, 2011 Order to receive additional public witness testimony. The following public witnesses appeared and gave testimony at this hearing: Marvin Woll and Russ Haddad.

Based on the testimony and exhibits of the witnesses and the entire record in this proceeding, the Commission now makes the following

FINDINGS OF FACT

1. Atlantic Wind is a limited liability company registered to do business in the State of North Carolina. Atlantic Wind is a wholly-owned subsidiary of Iberdrola Renewables, Inc. (IRI). IRI is a wholly-owned subsidiary of Iberdrola Renovables, S.A. (Iberdrola Renovables).

2. In compliance with G.S. 62-110.1 and Commission Rule R8-63, Atlantic Wind filed with the Commission an application for a CPCN authorizing the construction of a 300-MW wind facility (the Facility) to be located on approximately 20,000 acres in northeast North Carolina (the Project Area). Contemporaneous with the application, Atlantic Wind filed its registration as a new renewable energy facility pursuant to Commission Rule R8-66.

3. IRI currently operates more than 40 wind facilities and has more than 4,300 MW of installed wind capacity in the United States. Iberdrola Renovables has over 12,000 MW of installed wind capacity worldwide. Atlantic Wind is financially fit and operationally able to undertake the construction and operation of the Facility.

4. The Facility will consist of up to 150 wind turbines, electrical collector lines, a collection substation, a transmission voltage step-up substation, an interconnection switching station, an overhead sub-transmission line, an operations and maintenance facility, and several meteorological towers. The Facility will interconnect with the Virginia Electric and Power Company, d/b/a Dominion North Carolina Power (Dominion), 230-kV Winfall to Suffolk transmission line, which crosses the southwest portion of the Project Area in Perquimans County. The expected commercial operation date for the Facility is fourth quarter 2012.

5. Atlantic Wind is in discussions with North Carolina electric power suppliers for the sale of the power and renewable energy certificates (RECs) generated by the Facility.

6. Atlantic Wind provided substantial information to support the viability of the Facility. On-site wind data indicates there is likely sufficient wind for the Facility. Atlantic Wind has been in communication with numerous state and federal agencies, and no substantial environmental issues have been identified. In addition, the project was reviewed through the State Clearinghouse, and no adverse environmental impacts that would preclude the proposed development of the site were identified as long as the project satisfies all environmental permitting requirements. The Facility's net capacity factor is expected to be between 29%-36%, and the estimated net production is 750,000 to 950,000 megawatt-hours (MWh) per year.

7. The CPCN sought should be conditioned upon Atlantic Wind abstaining from attempting to exercise any power of eminent domain under North Carolina law as it relates to the Facility and constructing and operating the Facility in strict accordance with applicable laws and regulations, including any environmental permitting requirements.

8. During the 2007 Session, the North Carolina General Assembly passed S.L. 2007-397 (Senate Bill 3), which was signed into law on August 20, 2007. In that legislation, the General Assembly declared it to be the public policy of the State to promote the development of renewable energy through the implementation of a Renewable Energy and Energy Efficiency Portfolio Standard (REPS) and to encourage private investment in renewable energy.

9. Atlantic Wind has made a sufficient showing of need for the Facility based on the public benefits of wind-powered generation and the public policy of this State, as prescribed in Senate Bill 3, of promoting the development of renewable energy resources in this State. The generation of electricity with wind energy will diversify the resources used to meet North Carolina's energy needs. The Project will provide greater energy security for North Carolina by the use of a truly indigenous and renewable resource available within the State. It will enable a new, clean, renewable energy resource with low environmental, health and safety impacts, and significant economic development benefits to meet the growing demand for electricity in the State and in the region.

10. It is reasonable and appropriate to grant the CPCN as conditioned herein.

11. It is reasonable and appropriate to accept registration of the Facility as a new renewable energy facility.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 1 - 2

These findings of facts are essentially informational, procedural and jurisdictional in nature and are not in dispute. These findings are supported by the application and the testimony and exhibits of Atlantic Wind witnesses Poff and Mihalik. A copy of the Certificate of Authority issued by the Secretary of State of North Carolina establishing the authority of Atlantic Wind to do business in this State was attached as an exhibit to the application.

G.S. 62-110.1 and Commission Rule R8-63 provide that no person may begin construction of any facility for the generation of electricity to be directly or indirectly used for furnishing public utility service without first obtaining from the Commission a certificate that the public convenience and necessity requires, or will require, such construction.

An examination of the application and testimony and exhibits of Atlantic Wind's witnesses confirms that the applicant has complied with all filing requirements of the law and Commission rules associated with applying for a certificate to construct a merchant plant in North Carolina.

Commission Rule R8-66 requires the owner, including an electric power supplier, of each renewable energy facility that intends for RECs it earns to be eligible for use by an electric power supplier to comply with G.S. 62-133.8 to register the facility with the Commission. Atlantic Wind's filing includes certified attestations that: (1) the Facility is in substantial compliance with all federal and state laws, regulations and rules for the protection of the environment and conservation of natural resources; (2) the Facility will be operated as a new renewable energy facility; (3) Atlantic Wind will not remarket or otherwise resell any RECs sold to an electric power supplier to comply with G.S. 62-133.8; and (4) Atlantic Wind consents to the auditing of its books and records by the Public Staff insofar as those records relate to transactions with North Carolina electric power suppliers.

As recommended by the Public Staff, the Commission concludes that Atlantic Wind has complied with the Commission's rules for registration as a new renewable energy facility.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 3 - 5

These findings are supported by the application, the testimony and exhibits of Atlantic Wind witnesses Poff, Winneguth and Mihalik, and the testimony of Public Staff witness Craig.

Atlantic Wind is a wholly-owned subsidiary of IRI. Atlantic Wind was organized by IRI to develop the Facility and will receive its sole funding to construct and operate the Facility from IRI via equity infusions from Iberdrola Renovables, the parent of IRI. IRI has successfully participated in the wind energy market for many years. IRI has financed and constructed, and now operates, more than 40 wind facilities in the United States. IRI has experienced personnel and the technical capability required to operate the proposed project. Iberdrola Renovables is publicly-traded on the Madrid Stock Exchange and is the largest owner of renewable energy projects in the world. Iberdrola Renovables has over 12,000 MW of installed wind capacity worldwide. Iberdrola Renovables is 80% owned by Iberdrola, S.A., which has more than 45,000 MW of installed generating capacity and operates in over 50 countries. Iberdrola, S.A., has a market capitalization in excess of \$35 billion and maintains a corporate bond rating of A-from Standard and Poor's and A3 from Moody's. The extensive experience in the construction and operational control of wind energy facilities by IRI and its parent companies Iberdrola Renovables and Iberdrola, S.A., demonstrates that Atlantic Wind has access to the financial and operational capability to successfully construct and operate the Facility.

The Facility will be constructed on approximately 20,000 acres, spanning Pasquotank and Perquimans counties in northeast North Carolina. The Project Area is located between U.S. Hwy. 158 to the north, U.S. Hwy. 17 to the east and south, and County Road 1002 to the west. A proposed Project Area Map was included as an exhibit with the application. Dominion's 230-kV Winfall to Suffolk transmission line crosses the Project Area in Perquimans County. The Facility will interconnect with Dominion's transmission line. The interconnection facilities will be located within the boundaries of property under the control of Atlantic Wind.

Construction of the Facility is expected to occur throughout 2012, with a projected commercial operation date of fourth-quarter 2012. The expected service life of the Facility is 25 years. However, the trend in the wind energy industry has been to repower wind energy projects by upgrading existing towers and other infrastructure. It is likely that with future upgrades, the Facility could have a useful life of 30 years or longer.

Atlantic Wind filed an application in Docket No. EMP-49, Sub 1 for a Certificate of Environmental Compatibility and Public Convenience and Necessity to construct an interconnection line of less than one mile in length to interconnect the proposed Facility with the existing VEPCO transmission system. The application in Docket No. EMP-49, Sub 1 will be considered separately from the application that is the subject of this Order.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 6 - 7

The evidence supporting these findings of fact is found in the application, the direct and supplemental testimony of Atlantic Wind witness Poff, the agency letters submitted independently and as a result of the State Clearinghouse review process, and the testimony of Public Staff witness Lucas.

Atlantic Wind witness Poff testified that on-site wind data that had been collected for more than a year indicated the Facility's net capacity factor will be between 29% to 36% and that the estimated net production was 750,000 to 950,000 MWh per year. With

respect to environmental matters, witness Poff testified that both Pasquotank and Perquimans Counties have comprehensive wind energy facility siting ordinances, which include setback requirements, sound standards and shadow flicker standards that the Facility will meet or exceed. Witness Poff further testified to previous and on-going communication with various state and federal agencies and studies that had been or would be undertaken.

The comments by agencies submitted as a result of the State Clearinghouse review indicate that there will be no adverse environmental impacts if the proposed wind turbines are constructed, so long as the project satisfies all environmental requirements. However, in the comments, two agencies within the Department of Environment and Natural Resources (DENR) requested additional information on the environmental impacts of the project. Although obtaining all environmental approvals and permits is not necessary prior to Commission issuance of a CPCN, Public Staff witness Lucas recommended, and the Commission so concludes, that issuance of the CPCN will be conditioned on compliance with all environmental and other permitting requirements.

Public Staff witness Lucas recommended additional conditions to issuance of the CPCN. He recommended that the application be approved subject to the condition that Atlantic Wind will not assert that issuance of the CPCN in any way constitutes authority to exercise any power of eminent domain and that Atlantic Wind will abstain from attempting to exercise such power. He also recommended that the CPCN be subject to Commission Rule R8-63(e) and all orders, rules and regulations lawfully made by the Commission. The Commission concludes that these conditions are appropriate and should be adopted.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 8 - 9

The evidence supporting these findings of fact is found in the application and the testimony and exhibits of Atlantic Wind witness Poff and Public Staff witness Lucas.

Atlantic Wind witness Poff testified that the estimated net production of energy from the facility is 750,000 to 950,000 MWh per year and that the Facility will earn approximately 750,000 to 950,000 RECs that may be sold to the electric power suppliers to comply with the REPS requirements. Translated to residential electricity consumption, the Facility will produce enough electricity for between 55,000 to 75,000 North Carolina homes per year, on average. Atlantic Wind witness Poff testified that IRI is in discussions with North Carolina electric power suppliers regarding the sale of the power and the RECs generated by the Facility.

Witness Poff testified that the REPS was intended to diversify the resources used to reliably meet the energy needs of consumers in the State, provide greater energy security through the use of indigenous energy resources available within the State, encourage private investment in renewable energy and energy efficiency and provide improved air quality and other benefits to energy consumers and citizens of the State. The Facility will help achieve all four of these goals. Approving construction of the Facility will enable a new, clean, renewable energy resource with low environmental, health and safety impacts and significant economic development benefits to meet the growing demand for electricity in the State and in the region.

Public Staff witness Lucas testified that the Facility is needed to provide renewable energy that will help electric power suppliers in North Carolina meet the requirements of Senate Bill 3, which was enacted in 2007. Witness Lucas testified that energy generated by the Facility would displace energy generated with fossil fuel such as coal, oil and natural gas, which are a source of air pollutants such as SO_2 , NO_x , mercury, fine particles, as well as carbon dioxide, a major contributor to greenhouse gases. Witness Lucas also testified that North Carolina currently has no deliverable supply of indigenous fossil fuels and that 100% of these energy sources are currently imported into the State. Development of the wind energy facility would keep money in the State that would otherwise be used to pay for the importation of these fossil fuels. If approved and built, the Facility will be North Carolina's largest generator of electricity using in-State resources.

The Commission concludes that there has been a sufficient showing of need for the Facility based on the public benefits of wind-powered generation and the public policy of this State, as prescribed in Senate Bill 3, of promoting the development of renewable energy resources in this State.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 10 - 11

Commission Rule R8-63(e) and (f) set forth a number of additional conditions to be imposed on a certificate granted by the Commission, including that:

(1) The certificate shall be subject to revocation if (a) any of the federal, state, or local licenses or permits required for construction and operation of the generating facility is not obtained, or having been obtained, is revoked pursuant to a final, non-appealable order; (b) required reports or fees are not filed with or paid to the Commission; and/or (c) the Commission concludes that the certificate holder filed with the Commission information of a material nature that was inaccurate and/or misleading at the time it was filed; provided that, prior to revocation pursuant to any of the foregoing provisions, the certificate holder shall be given thirty (30) days' written notice and opportunity to cure.

(2) The certificate must be renewed if the applicant does not begin construction within two years after the date of the Commission Order granting the certificate.

(3) A certificate holder must notify the Commission in writing of any plans to sell, transfer or assign the certificate and the generating facility.

(4) Progress reports, including any revisions in cost estimates, shall be submitted on an annual basis until construction is completed. The first annual progress report shall be due one year from the date of this Order.

For all of the reasons explained in this Order and subject to the conditions imposed herein, the Commission finds that the construction of the Facility is in the public interest and justified by the public convenience and necessity as required by G.S. 62-110.1. The Commission further finds good cause to accept registration of the Facility as a new renewable energy facility. Atlantic Wind shall annually file the information required by Commission Rule R8-66 on or before April 1 of each year. To the extent that Atlantic Wind is not otherwise participating in a REC tracking system, it will be required to participate in the NC-RETS REC tracking system in order to facilitate the issuance of RECs.

IT IS, THEREFORE, ORDERED as follows:

1. That a Certificate of Public Convenience and Necessity should be, and is hereby, granted to Atlantic Wind for the construction of a 300-MW wind facility, consisting of up to 150 wind turbines and associated equipment, in the Project Area, which is located in Pasquotank and Perquimans Counties, North Carolina. This Order shall constitute the Certificate. This Certificate is subject to the following conditions:

(a) The Certificate is not intended to confer the power of eminent domain under North Carolina law for the construction of the 300-MW wind facility certificated herein, and Atlantic Wind and its successors shall abstain from attempting to exercise any power of eminent domain under North Carolina law to construct the wind facility authorized by the Certificate.

(b) The Facility shall be constructed and operated in strict accordance with applicable laws and regulations, including any environmental permitting requirements. The certificate shall be subject to revocation if any of the federal or state licenses, permits or exemptions required for construction and operation of the generating facility are not obtained, and the Commission finds that, as a result, the public convenience and necessity no longer requires, or will require, construction of the Facility.

(c) The Certificate is subject to the conditions of Commission Rule R8-63(e) and (f) and all orders, rules and regulations as are now or may hereafter be lawfully made by the Commission.

2. That the registration by Atlantic Wind of the Facility, a 300-MW wind project in Pasquotank and Perquimans Counties, North Carolina, as a new renewable energy facility shall be, and hereby is, accepted.

3. That Atlantic Wind shall annually file the information required by Commission Rule R8-66 on or before April 1 of each year.

ISSUED BY ORDER OF THE COMMISSION:

This the $\underline{3^{rd}}$ day of May, 2011.

NORTH CAROLINA UTILITIES COMMISSION

Hail L. Mount

Gail L. Mount, Deputy Clerk

kh050211.01

STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. EMP-61, SUB 0

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of Application of Pantego Wind Energy LLC For a) Certificate of Public Convenience and Necessity) to Construct a Wind Facility of up to 80 MW in) Beaufort County and Registration as a New) Renewable Energy Facility

ORDER GRANTING CERTIFICATE AND ACCEPTING REGISTRATION

HEARD: Thursday, November 17, 2011 at 7:00 p.m. in District Courtroom 211, Beaufort County Courthouse, 112 West Second Street, Washington, North Carolina

> Tuesday, December 6, 2011, in Room 2115, Dobbs Building, 430 North Salisbury Street, Raleigh, North Carolina

)

Commissioner William T. Culpepper, III, Presiding, Commissioner Susan BEFORE: Warren Rabon and Commissioner Lucy T. Allen

APPEARANCES:

For Pantego Wind Energy LLC:

Henry C. Campen, Jr. Thomas N. Griffin, III Katherine E. Ross Parker Poe Adams & Bernstein LLP Wells Fargo Capital Center 150 Fayetteville Street, Suite 1400 Raleigh, North Carolina 27601

For the North Carolina Sustainable Energy Association:

Kurt J. Olson Michael Youth Post Office Box 6465 Raleigh, North Carolina 27628 For the Using and Consuming Public:

Tim Dodge, Staff Attorney Dianna Downey, Staff Attorney Public Staff – North Carolina Utilities Commission 4326 Mail Service Center Raleigh, North Carolina 27699

BY THE COMMISSION: On September 2, 2011, Pantego Wind Energy LLC (Pantego Wind or the Applicant) filed an application with the Commission seeking a Certificate of Public Convenience and Necessity (CPCN) pursuant to G.S. 62-110.1(a) and Commission Rule R8-63 to construct a wind turbine electric generating facility (Facility) of up to 80 megawatts (MW) in Beaufort County, North Carolina. On the same date, Pantego Wind prefiled the direct testimony of David Groberg and Steven Ryder in support of the application. Pantego Wind contemporaneously filed its registration as a new renewable energy facility in accordance with Commission Rule R8-66.

On September 7, 2011, the Public Staff filed a Notice of Completeness indicating that Pantego Wind's application met the requirements of Commission Rule R8-63 and recommending that the application be set for hearing. On September 13, 2011, the Commission issued an Order setting the application for hearing, requiring Pantego Wind to provide public notice, and establishing deadlines for the filing of petitions to intervene, intervenor testimony and rebuttal testimony.

On October 21, 2011, the North Carolina Department of Administration filed comments through the State Clearinghouse stating that it had determined that pursuant to 1 NCAC 25.0506(c), a supplemental document addressing concerns of the Department of Environment and Natural Resources (DENR) should be submitted to the Clearinghouse for further review and comment prior to concurrence with the proposal. DENR's main concerns related to the lack of environmental analysis and the Facility's potential impacts on migratory birds.

On October 27, 2011, Pantego Wind filed an affidavit of publication as required by the Commission in its September 13, 2011 Order.

On November 4, 2011, the North Carolina Sustainable Energy Association (NCSEA) filed a Petition to Intervene, which was granted by Commission Order issued on November 10, 2011. No other petitions to intervene were filed.

On November 17, 2011, pursuant to the Commission's September 13, 2011 Order, the Commission conducted a hearing in Washington, North Carolina for the purpose of receiving public witness testimony. The following public witnesses appeared and gave testimony at this hearing: Larry C. Hodges, Tom G. Thompson, Heidi Jernigan Smith, John Michael Chrystal, Frances Armstrong, O.C. Jones, Jennifer Alligood, Derb Carter, Dorris Morris, Mark Buckler, Buster Manning, Maurice Manning, Leaman Allen, Tom Richter, Dianne Bowen, Vann Rogerson, and Robert Scull. On November 18, 2011, the Public Staff filed a Motion for Extension of Time to File Testimony, which was granted by Commission Order issued on November 22, 2011.

On November 21, 2011, Pantego Wind filed the supplemental testimony of David Groberg and Karyn Coppinger.

On November 23, 2011, NCSEA prefiled the direct testimony of Paul Quinlan, Managing Director. On the same date, the Public Staff prefiled the direct testimony of Kennie D. Ellis, Engineer with the Public Staff Electric Division, and the affidavit of Calvin C. Craig, III, Financial Analyst with the Public Staff Economic Research Division, together with a Notice of Affidavit.

On November 30, 2011, Pantego Wind filed a Motion to Excuse its witness Steven Ryder, which was granted by Commission Order issued on December 1, 2011.

On November 30, 2011, the Public Staff filed the recommendation required by Commission Rule 8-66(e) indicating that Pantego Wind's registration statement was complete and recommending that the Facility be considered a new renewable energy facility.

On December 2, 2011, Pantego Wind filed a copy of a letter to Melba McGee, Environmental Review Coordinator for DENR providing DENR with the supplemental testimony of David Groberg and Karyn Coppinger.

On December 5, 2011, additional comments of DENR with two recommendations were filed by the State Clearinghouse. The Natural Heritage Program (NHP) stated it had learned that the northwestern 70% of the proposed wind farm area lies within an Important Bird Area (IBA) as identified by Audubon North Carolina. Therefore, NHP recommended that field studies be conducted from November 2011 into February 2012, and that a determination be made regarding the impact of the Facility on birds.

On December 7, 2011, the United States Fish and Wildlife Service (USFWS) filed a letter dated December 6, 2011, stating that it was currently providing the Applicant with technical assistance, and that the tundra swan was the species of special concern. USFWS questioned whether the current field studies would be sufficient to assess the potential impacts to the migratory birds of the proposed Facility, questioned whether there would be other environmental reviews, and suggested delaying a CPCN decision until the completion of the current field studies.

On December 6, 2011, the Commission conducted an evidentiary hearing in Raleigh as scheduled at which additional public witness testimony was received from the following public witnesses: Larry Hodges, Lena Gallitano, Lisa Morris, Doris Morris, Frances Armstrong, Marvin Woll, Dick Hamilton, John R. Spruill, Derb Carter, Heather

Starck, Tom Thompson, Franklin E. Bell, Randell Woodruff, Dan Richter, Joe Albea, and Dianne Laughinghouse Bowen.

At the evidentiary hearing, Pantego Wind presented the direct and supplemental testimony and an exhibit of David Groberg and the supplemental testimony of Karyn Coppinger. The direct testimony of Steven Ryder was entered into evidence without objection pursuant to previous stipulation. NCSEA presented the direct testimony of Paul Quinlan, Managing Director. The Public Staff presented the direct testimony of Kennie D. Ellis, Engineer, Public Staff Electric Division. The affidavit of Calvin C. Craig III, Financial Analyst, Public Staff Economic Research Division, was entered into evidence without objection.

On December 15, 2011, Pantego Wind filed a letter with the Commission stating that it did not object to the entry into evidence of a DVD segment "Birds of Winter" offered by public witness Albea during the December 6, 2011 hearing. On December 22, 2011, the Commission issued an order admitting the exhibit into evidence.

On January 23, 2012, a Joint Proposed Order was filed by Pantego Wind, NCSEA, and the Public Staff.

Based on the foregoing, the evidence presented at the hearings, and the entire record in this matter, the Commission makes the following:

FINDINGS OF FACT

1. Pantego Wind is a limited liability company registered to do business in the State of North Carolina. Pantego Wind is a subsidiary of Invenergy Wind North America LLC (IWNA). IWNA is an affiliate of Invenergy LLC (Invenergy).

2. In compliance with G.S. 62-110.1 and Commission Rule R8-63, Pantego Wind filed with the Commission an application for a CPCN authorizing the construction of a wind turbine electric generating facility of up to 80 MW (Facility) to be located on approximately 11,000 acres in Beaufort County, North Carolina (Project Area). Contemporaneous with the application, Pantego Wind filed its registration as a new renewable energy facility pursuant to Commission Rule R8-66.

3. The Facility will consist of wind turbine generators, underground electrical collection and communications systems, a collection substation with a 34.5 kV/115 kV transformer, an operations and maintenance building, access roads, and a permanent meteorological tower. The Facility will interconnect with the Virginia Electric and Power Company, d/b/a Dominion North Carolina Power (Dominion), Pantego Substation. The expected commercial operation date for the Facility is fourth quarter 2012.

4. Pantego Wind is in discussions with North Carolina electric power suppliers for the sale of the power and renewable energy certificates (RECs) generated by the Facility.

5. Pantego Wind provided sufficient information to support the operational viability of the Facility. The Facility's net capacity factor is expected to be 25% to 36%, and the estimated net production is 174,000 - 250,000 megawatt-hours (MWh) per year.

6. Pantego Wind is financially fit and operationally able to undertake the construction and operation of the Facility.

7. Pantego Wind has been in communication with a number of State and federal agencies, including the United States Army Corps of Engineers (Corps), the United States Fish and Wildlife Service (USFWS), DENR, and the North Carolina Wildlife Resources Commission (NCWRC) concerning the Facility.

8. The Facility was reviewed through the State Clearinghouse, and additional information was requested by DENR. DENR's main concerns related to the lack of environmental analysis and the Facility's potential impacts on migratory birds. The Applicant filed supplemental testimony of David Groberg and Karyn Coppinger, which included information in response to DENR. The Applicant has been providing and will continue to provide information to State and federal agencies regarding potential environmental impacts associated with the Facility. The Facility shall only be built and operated after Pantego Wind receives all necessary environmental or other permits and approvals.

9. The Facility is subject to federal, State and local laws and regulations related to the construction and operation of the Facility, including the federal Clean Water Act, Migratory Bird Treaty Act (MBTA), Endangered Species Act (ESA), Bald and Golden Eagle Protection Act (BGEPA) and the state Coastal Area Management Act (CAMA). The USFWS has regulatory and enforcement authority for the federal laws protecting wildlife.

10. The USFWS has developed Draft Land-Based Wind Energy Guidelines for Wind Turbine Siting (Guidelines). These Guidelines are intended to provide wind developers and regulatory agencies with information needed to identify, assess and monitor potential adverse impacts of wind energy projects.

11. The CPCN should be conditioned upon: (a) Pantego Wind abstaining from attempting to exercise any power of eminent domain under North Carolina law as it relates to the Facility; (b) the Facility being constructed and operated in accordance with applicable laws and regulations, including any environmental permitting requirements; (c) Pantego Wind, no less than 45 days prior to erecting turbines, meeting certain preconstruction conditions as prescribed in this Order; (d) the Commission finding that the preconstruction conditions have been satisfied; (e) in addition to Pantego Wind's assertions that it is currently following a tiered approach in accordance with the draft Guidelines in consultation with USFWS, Pantego Wind following the Guidelines once the Guidelines are published in the Federal Register (f) Pantego Wind filing annually with the Commission updated information on its monitoring and management activities at the Facility; and (g) other applicable conditions in Commission orders, rules and regulations as are or may hereafter be lawfully made by the Commission.

12. During the 2007 Session, the North Carolina General Assembly enacted S.L. 2007-397 (Senate Bill 3). In that legislation, the General Assembly declared it to be the public policy of the State to promote the development of renewable energy through the implementation of a Renewable Energy and Energy Efficiency Portfolio Standard (REPS) and to encourage private investment in renewable energy.

13. Pantego Wind has made a sufficient showing of need for the Facility based on the public benefits of wind-powered generation and the public policy of this State, as prescribed in Senate Bill 3, of promoting the development of renewable energy resources in this State.

14. It is reasonable and appropriate to grant the CPCN as conditioned herein.

15. It is reasonable and appropriate to accept registration of the Facility as a new renewable energy facility.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 1 – 2

These findings of fact are essentially informational, procedural and jurisdictional in nature and are not in dispute. These findings are supported by the application and the testimony of Pantego Wind witnesses Groberg and Ryder. A copy of the Certificate of Authority issued by the Secretary of State of North Carolina establishing the authority of Pantego Wind to do business in this State was attached as an exhibit to the application.

An examination of the application and testimony and exhibits of Pantego Wind's witnesses confirms that the Applicant has complied with all filing requirements of the law and Commission rules associated with applying for a certificate to construct a merchant plant in North Carolina.

Commission Rule R8-66 requires the owner, including an electric power supplier, of each renewable energy facility that intends for RECs it earns to be eligible for use by an electric power supplier to comply with G.S. 62-133.8 to register the facility with the Commission. Pantego Wind's filing includes certified attestations that: (1) the Facility is in substantial compliance with all federal and State laws, regulations and rules for the protection of the environment and conservation of natural resources; (2) the Facility will be operated as a new renewable energy facility; (3) Pantego Wind will not remarket or otherwise resell any RECs sold to an electric power supplier to comply with G.S. 62-133.8; and (4) Pantego Wind consents to the auditing of its books and records by the Public Staff insofar as those records relate to transactions with North Carolina electric power suppliers.

As recommended by the Public Staff, the Commission concludes that Pantego Wind has complied with the Commission's rules for registration as a new renewable energy facility.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 3 - 5

The evidence supporting these findings of fact may be found in the application and the testimony of Pantego Wind witness Groberg.

According to the application, and as Pantego Wind witness Groberg testified, the Facility will be constructed on approximately 11,000 acres in Beaufort County, North Carolina, near the communities of Pantego and Terra Ceia. The Project Area is located between SR 1612 (Terra Ceia Road) and SR 1619 (Christian School Road) to the southwest, extends north along SR 1261 (Old 97 Road) and continues east of Pantego along SR 1700 (Beech Ridge Road). A map of the proposed Project Area was included as an exhibit with the application.

Pantego Wind witness Groberg testified that the Facility will interconnect with the Dominion Pantego Substation through a generator lead line. The interconnection facilities will be located within the boundaries of property under the control of Pantego Wind. Invenergy is in discussions with North Carolina investor-owned utilities, electric cooperatives and municipal electric suppliers about the sale of the power and RECs generated by the Facility.

Construction of the Facility is expected to occur throughout 2012, with a projected commercial operation date in fourth quarter 2012. The expected service life of the Facility is 25 years. However, the Facility may be upgraded with more efficient equipment to extend the service life of the Facility to 30 years or longer.

Pantego Wind witness Groberg testified that the maximum capacity of the Facility will be 74 MW when taking into account losses in the collection system and the Facility's monitoring system. On-site wind data indicates the Facility's capacity factor will be 25% to 36% and that the estimated net production will be 174,000 – 250,000 MWh per year.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 6

This finding of fact is supported by the application, the testimony of Pantego Wind witnesses Groberg and Ryder, the testimony of NCSEA witness Quinlan and the testimony of Public Staff witnesses Craig and Ellis. This finding is not disputed by any party.

Pantego Wind is a subsidiary of IWNA. IWNA is an affiliate of Invenergy. Pantego Wind was organized to develop the Facility. According to Pantego Wind witness Ryder, Invenergy will arrange the financing of the Facility, which will include a construction loan plus equity provided by Invenergy. Third-party tax investors will provide tax-equity financing once the Facility achieves commercial operation. According to Public Staff witness Craig, Invenergy has sufficient assets to attract the necessary capital to fund the Facility, and the company's ratio of debt to equity is reasonable. During his investigation, witness Craig learned that Invenergy has financed more than 20 wind generating facilities in Europe and North America. He testified that the parent company has extensive experience in funding similar projects and he believes that the plan they have submitted to finance the Facility is viable. In addition, witness Craig stated that the projected financial statements for Pantego Wind are sound and reasonable. Witness Craig concluded that Pantego Wind is financially viable to construct the proposed Facility.

Pantego Wind witness Groberg testified concerning the managerial and technical capability of Invenergy. He testified that as an Invenergy subsidiary, Pantego Wind will have full access to the managerial and technical capabilities of Invenergy to construct and operate the Facility. Invenergy's business model is to operate the wind farms it builds. Invenergy currently manages over 1,200 operating wind turbines. Public Staff witness Ellis agreed that Pantego Wind and Invenergy have the managerial and technical capability to build and operate the Facility.

NCSEA witness Quinlan testified that Invenergy has demonstrated experience at developing, owning, and operating wind generation facilities and that Invenergy's managerial, technical and financial expertise makes the company well suited to develop, own and operate the Facility. Invenergy has placed into service 26 wind facilities totaling over 2,000 MW of capacity. Since 2001, Invenergy reports it has raised more than \$7 billion in financing and worked with more than 60 financial institutions worldwide.

Based on the foregoing, the Commission concludes that the extensive experience in the construction and operational control of wind energy facilities by Invenergy demonstrates that Pantego Wind has access to the financial and operational capability to successfully construct and operate the Facility.

EVIDENCE AND CONCLUSION FOR FINDINGS OF FACT NOS. 7 – 10

The evidence supporting these findings of fact is found in the application, the testimony and exhibit of Pantego Wind witnesses Groberg and Coppinger, the testimony of NCSEA witness Quinlan, the agency letters submitted independently and as a result of the State Clearinghouse review process, and the testimony of Public Staff witness Ellis.

Pantego Wind witness Groberg testified that Invenergy held a scoping meeting to get input and guidance from State and federal regulatory agencies about potential sites in April 2010. Representatives from USFWS, the Corps, NCWRC and multiple branches of DENR were in attendance. In July 2011, Invenergy held a second meeting with multiple State and federal agencies to update the agencies and to solicit feedback on an initial layout for the Facility. This meeting was attended by the Corps, branches of DENR, including the Division of Coastal Management (DCM), the Division of Water Quality (DWQ) and the Division of Marine Fisheries (DMF), as well as NCWRC and representatives of the Marine Corps and the Navy.

Pantego Wind witness Groberg testified that in June 2011, Invenergy had a preapplication meeting with the Corps. Invenergy has completed its wetland delineations for impacts anticipated on land it has under lease or easement. The Corps will confirm Invenergy's wetland delineations. Invenergy will have to obtain a permit under Section 404 of the Clean Water Act from the Corps for the Facility. The Corps will determine the type of permit (individual or nationwide) that is appropriate for the Facility.

Pantego Wind witness Groberg testified that Invenergy is working with DWQ to determine the need for additional permits or authorizations from DWQ. Invenergy submitted a request for jurisdictional determination of Coastal Area Management Act (CAMA) resources to DCM. In a letter dated August 29, 2011, DCM stated there was one crossing that would require a CAMA permit. Invenergy continues to discuss with DENR other permits, approvals and determinations that may be required for the Facility.

The USFWS has developed Draft Land-Based Wind Energy Guidelines for Wind Turbine Siting (Guidelines) in collaboration with USFWS's Wind Turbine Guidelines Advisory Committee. The Guidelines are intended to provide wind developers and regulatory agencies with the information needed to identify, assess, and monitor the potential adverse impacts of wind energy projects on wildlife and their habitats, particularly migratory birds and bats. The Guidelines focus on a tiered approach to gathering information on a site and potential risks to wildlife and wildlife habitat. Depending on the results obtained from surveys in each tier, additional surveys and mitigation measures may be recommended. These Guidelines will be implemented by USFWS once published in the Federal Register.

Pantego Wind witness Coppinger testified that the tiered approach Invenergy uses to develop its projects is designed to develop a body of information about a site. She testified that the combined use of multiple data sources creates a scientifically valid baseline from which to evaluate risk, determine if additional studies are needed, develop avoidance and minimization measures and, if warranted identify off-site mitigation to compensate for unavoidable impacts. Witness Coppinger testified that Invenergy is using the tiered approach recommended by the USFWS and has been in consultation with USFWS since April 2010. In February 2011, Invenergy completed a desktop analysis of the Project Area. From February 2011 through November 2011 Invenergy conducted a multi-season bird survey to develop a species list and to collect bird abundance data for the Project Area. Invenergy initiated additional bird studies beginning in November 2011, which are continuing through March 2012. The studies include an avian point count study, a tundra swan use study, aerial surveys, and a redcockaded woodpecker habitat assessment. The studies are designed to describe the temporal and spatial use of the study area by birds; determine locations in and around the Project Area of tundra swan roosts, foraging habitat and daily flight routes used between the roosts and foraging grounds; verify the presence and status of previously identified bald eagle nests; locate new bald eagle nests or nest building activities; identify the species of raptors nesting and the nest density occurring within the Project Area; identify locations and estimate sizes of tundra swan and other waterfowl flocks; and document other wildlife observed in the Project Area through incidental

observations. Invenergy has also reviewed environmental studies of portions of Beaufort County previously completed by the Navy, in connection with the proposed outlying landing field.

According to witness Coppinger, based on all of the study data, and in consultation with wildlife agencies, Invenergy will determine if additional studies will be needed. Invenergy will also undertake steps to avoid, minimize and, if necessary, mitigate impacts to birds and bats. Post-construction monitoring for birds and bats will be conducted and a post-construction monitoring and adaptive management plan will be developed in consultation with the USFWS. Invenergy will also develop an avian and bat protection plan in consultation with the USFWS.

Pantego Wind witness Groberg testified that the USFWS enforces federal laws that protect avian species, including the ESA, the BGEPA, and the MBTA. Pantego Wind witnesses Groberg and Coppinger testified that Invenergy is developing the Facility in consultation with USFWS, including consultation on site selection, bird study protocols, the avian and bat protection plan, and the post-construction monitoring and adaptive management plan. Witness Groberg and witness Coppinger testified that there are no identified endangered species in the Project Area, and further studies will be conducted to confirm the absence of habitat for ESA protected species. With respect to the BGEPA, Invenergy is conducting further studies and is in ongoing discussions with USFWS to determine the potential for impacts to bald eagles. There are voluntary "incidental take" permits under the BGEPA which are authorized by rule, <u>see</u> 50 CFR 22.26, and Invenergy's studies will help determine whether a voluntary permit under the BGEPA is warranted. With respect to the MBTA, Invenergy is conducting further studies to evaluate for impacts to migratory birds. There is no incidental take permit under the MBTA for which Invenergy can apply.

While the permits under the ESA and BGEPA are voluntary, compliance with the law is not, and Pantego Wind witnesses Groberg and Coppinger testified that Invenergy will comply with all federal and State laws, rules and regulations in the construction and operation of the Facility. The ESA and BGEPA provide for criminal and civil penalties for violation of the law, and the MBTA provides for criminal penalties. Public Staff witness Ellis testified that neither the Public Staff nor the Commission has the expertise to resolve the environmental issues raised regarding the Facility and that the Commission traditionally leaves these matters to the State and federal agencies that have been given statutory responsibility for such issues. Witness Ellis also testified that the Public Staff is satisfied with the dialogue underway between the Applicant and environmental agencies, and that if the issues cannot be resolved to the satisfaction of the agencies, the agencies will take appropriate action within their statutory authority.

EVIDENCE AND CONCLUSION FOR FINDING OF FACT NO. 11

This finding of fact is supported by the application, the testimony of NCSEA witness Quinlan, the testimony of Pubic Staff witness Ellis, and the agency letters submitted independently and as a result of the State Clearinghouse review process.

Public Staff witness Ellis recommended that the application be approved subject to the condition that Pantego Wind will not assert that issuance of the CPCN in any way constitutes authority to exercise any power of eminent domain and that Pantego Wind will abstain from attempting to exercise such power. He also recommended that the CPCN be subject to Commission Rule R8-63(e) and (f) and all orders, rules and regulations as are now or may hereafter by lawfully made by the Commission. The Commission concludes that this condition is appropriate and should be adopted. The Commission also concludes that in its annual reports filed under Rule R8-63(f), the Applicant shall identify the number and location of turbines installed during the applicable year and the cumulative nameplate capacity of all such turbines. The Applicant's compliance with the conditions of the CPCN is subject to the Commission's continuing jurisdiction.

Agencies within DENR requested additional information on the environmental impacts of the Facility. Although obtaining all environmental approvals and permits is not necessary prior to Commission issuance of a CPCN, Public Staff witness Ellis and NCSEA witness Quinlan recommended, and the Commission so concludes, that issuance of the CPCN will be conditioned on strict compliance with all applicable laws and regulations, including the Endangered Species Act (16 USC § 1531 et seq.), the Migratory Bird Treaty Act (16 USC § 70-1 et seq.), the Bald and Golden Eagle Protection Act (16 USC § 1531 et seq.), and any environmental permitting requirements.

Public Staff witness Ellis recommended that plans related to wildlife be filed with the Commission, and that the Applicant file an updated site layout. Ongoing environmental studies and consultation with environmental agencies, including, but not limited to, USFWS and DENR and final turbine selection may alter the layout of the Facility.

The Commission concludes that issuance of the CPCN will be conditioned on the Applicant, no less than 45 days prior to erecting turbines at the Facility, filing the following items with the Commission:

(i) An avian and bat protection plan, prepared in consultation with the USFWS, which shall include summary data and an analysis of the pre-construction bird and bat surveys conducted by the Applicant and a history of the consultation between the USFWS and the Applicant.

(ii) A post-construction monitoring and adaptive management plan prepared in consultation with the USFWS.

(iii) A letter summarizing the Applicant's ongoing consultation with wildlife agencies and attaching the letter correspondence between the Applicant and the USFWS concerning both the avian and bat protection plan and the post-construction monitoring and adaptive management plan.

(iv) An updated site layout.

The Applicant shall not commence erection of turbines until the Commission has completed its review of items (i) through (iv) above and issued an order finding that these conditions have been satisfied. The Commission shall issue an order within approximately 30 days of the filing of all four of the documents required above, stating whether or not the above-stated conditions have been satisfied.

The Commission further concludes that issuance of the CPCN will be conditioned on, in addition to the conditions stated above, Pantego Wind following the Draft Land-Based Wind Energy Guidelines once the Guidelines are published in the Federal Register, and also filing with the Commission, on an annual basis, a letter describing the progress of any post-construction monitoring and any adaptive management strategies implemented as called for in the post-construction monitoring and adaptive management plan developed in consultation with the USFWS. The Applicant shall include with this letter a copy of its annual report to the USFWS describing the results of each year of post-construction monitoring called for in the post-construction monitoring and adaptive management plan, including, but not limited to, avian and bat fatality reports, which shall identify any dead or injured avian or bat species, location of find by turbine number and date of the find for the reporting period in accordance with the reporting protocols established by the USFWS. Furthermore, the Applicant shall notify the Commission and USFWS within forty-eight (48) hours of the discovery of either of the following:

(a) five or more dead or injured migratory avian or bat species;

(b) one or more dead or injured bald or golden eagle.

EVIDENCE AND CONCLUSION FOR FINDINGS OF FACT NOS. 12 - 13

The evidence supporting these findings of fact is found in the application, the testimony and exhibit of Pantego Wind witness Groberg, the testimony of NCSEA witness Quinlan and the testimony of Pubic Staff witness Ellis.

Pantego Wind witness Groberg testified that the REPS was intended to diversify the resources used to reliably meet the energy needs of consumers in the State, provide greater energy security through the use of indigenous energy resources available within the State, encourage private investment in renewable energy and energy efficiency and provide improved air quality and other benefits to energy consumers and citizens of the State. The Facility will help achieve all four of these goals. Approving construction of the Facility will enable a new, clean, renewable energy resource with significant economic benefits to meet the growing demand for electricity in the State and in the region.

Pantego Wind witness Groberg also testified that the estimated net production of energy from the Facility will be 174,000 – 250,000 MWh per year and that the Facility will earn RECs that may be sold to the electric power suppliers to comply with the REPS requirements. Pantego Wind witness Groberg testified that Invenergy is in discussions

with North Carolina electric power suppliers regarding the sale of the power and the RECs generated by the Facility.

NCSEA witness Quinlan testified that the development of the Facility clearly meets many of the objectives established by the REPS. The Facility will diversify North Carolina's energy resources as the State currently lacks a completed utility-scale wind generation facility. Witness Quinlan further testified that with no air emissions, wind turbines contribute to improved air quality.

Public Staff witness Ellis testified that the Facility is needed to provide renewable energy that will help electric power suppliers in North Carolina meet the requirements of Senate Bill 3. Witness Ellis testified that energy generated by the Facility would displace energy generated with fossil fuels such as coal, oil and natural gas, which are a source of air pollutants such as SO₂, NO_x, mercury, and fine particulates, as well as carbon dioxide, a major contributor to greenhouse gases. Witness Ellis also testified that North Carolina currently has no deliverable supply of indigenous fossil fuels and that 100% of these energy sources are currently imported into the State. Development of the Facility would keep money in the State that would otherwise be used to pay for the importation of these fossil fuels. If approved and built, the Facility will be North Carolina's first or second largest wind generator in the State.

The Commission concludes that there has been a sufficient showing of need for the Facility based on the public benefits of wind-powered generation and the public policy of this State, as prescribed in Senate Bill 3, of promoting the development of renewable energy resources in this State.

EVIDENCE AND CONCLUSION FOR FINDINGS OF FACT NOS. 14 - 15

The evidence supporting these findings of fact is found in the application, the testimony and exhibit of Pantego Wind witnesses Groberg and Coppinger, the testimony of the public witnesses, the testimony of NCSEA witness Quinlan, the testimony of Pubic Staff witness Ellis, and the agency letters submitted independently and as a result of the State Clearinghouse review process.

The Commission has received numerous public comments in this proceeding from members of the general public, as well as statements from State and federal agencies. While many of the public comments have been filed in support of the project, other comments point out that significant environmental concerns exist regarding the construction and operation of the Facility. At its November 17, 2011 and December 6, 2011 hearings, the Commission heard testimony from members of the public, including Audubon North Carolina, Friends of Pocosin Lakes National Wildlife Refuge, and the Southern Environmental Law Center, about the possible environmental impacts of the Facility. Specifically, the northwestern 70% of the Project Area lies within the Pungo-Pocosin Lakes IBA as identified by Audubon North Carolina. This IBA identifies wintering waterfowl habitat, which includes both the Pungo and Phelps lakes and a large area of surrounding fields that are used for foraging. Annually from late October until March, tens of thousands

of tundra swans and several thousands of snow geese roost on Pungo Lake and forage in the fields located nearby. Given the numbers of birds that use the Project Area, witnesses expressed concerns that significant migratory bird mortality will likely occur unless avoidance and other mitigation measures are developed and implemented. The public witnesses also expressed concerns that the tundra swans will be impacted by post construction habitat avoidance. Other witnesses asserted that agricultural losses would occur due to an increase in mosquitoes if bats are injured. These witnesses also cited health concerns related to greater use of pesticides caused by increase in insects and human disease proliferation with increased mosquitoes. A number of people urged the Commission to delay the issuance of a CPCN until bird and bat studies are completed and the full possible impacts of the Facility known.

The Commission appreciates the public participation in this matter and recognizes the unique nature and resources of the Albemarle-Pamlico peninsula. The Commission concludes, however, that issues pertaining to regulation of wildlife are more properly addressed by agencies with sufficient expertise and regulatory authority in the areas of environmental and natural resource protection, including, but not limited to, the USFWS, the Corps, and DENR. The USFWS and DENR are the regulatory agencies charged with the protection of wildlife, including but not limited to enforcing the federal and any state laws protecting migratory birds. The Corps and DENR are the agencies primarily charged with protecting our natural resources. Furthermore, the Commission is concerned that denial of a CPCN for the Facility based on migratory bird issues when construction of the Facility is not prohibited by any provisions of the MBTA, or any regulations adopted by the USFWS in association therewith, would be inconsistent with state public policy prohibiting certain state agencies from adopting more restrictive rules for the protection of the environment or natural resources than those imposed by federal law or rule.¹

G.S. 62-2 sets forth declarations of policy, including, but not limited to "encourage and promote harmony between public utilities, their users and the environment," and "promote the development of renewable energy and energy efficiency." One of the primary means of fostering harmony between the need for electric energy and the environment is to enhance the development of renewable energy resources. Pursuant to Senate Bill 3, the Commission is required to encourage the development of a diversified portfolio of renewable energy resources at a reasonable cost to ratepayers. Land-based wind energy is fast becoming one of the more reasonably priced renewable energy resources. The Commission must balance any potential negative effects of a particular wind energy project with the proven environmental benefits of reducing fossil fuel generation. It is at times a delicate balance, one that might require some risk of change in the natural habitat of wildlife. However, the use of the tiered approach as set forth in the USFWS Guidelines will allow the USFWS, as well as the parties, to assess the potential adverse effects to wildlife.

¹ See North Carolina Session Law 2011-398. Although the Commission is not subject to this restriction, the statute is illustrative of appropriate considerations governing the protection of the environment and natural resources.

and their habitats and to implement mitigation measures during the siting, construction and operation of the Facility. Therefore, to promote harmony between utilities, users and the environment, as well as to promote the development of renewable energy, the Commission has conditioned the CPCN in a manner to keep the Commission, other agencies, and the public fully informed on the efforts being taken to minimize any potential environmental impacts resulting from the Facility.

In addition to the conditions enumerated in Finding of Fact No. 11, Commission Rule R8-63(e) and (f) set forth a number of additional conditions to be imposed on a certificate granted by the Commission, including that:

(1) The CPCN shall be subject to revocation if (a) any of the federal, State, or local licenses or permits required for construction and operation of the generating facility is not obtained or, having been obtained, is revoked pursuant to a final, non-appealable order; (b) required reports or fees are not filed with or paid to the Commission; and/or (c) the Commission concludes that the CPCN holder filed with the Commission information of a material nature that was inaccurate and/or misleading at the time it was filed; provided that, prior to revocation pursuant to any of the foregoing provisions, the CPCN holder shall be given thirty (30) days' written notice and opportunity to cure.

(2) The CPCN must be renewed if the Applicant does not begin construction within two years after the date of the Commission Order granting the certificate.

(3) A CNCP holder must notify the Commission in writing of any plans to sell, transfer or assign the CPCN and the generating facility.

(4) Progress reports, including any revisions in cost estimates, shall be submitted on an annual basis until construction is completed. The first annual progress report shall be due one year from the date of this Order.

For all of the reasons explained in this Order and subject to the conditions imposed herein, the Commission finds that the construction of the Facility is in the public interest and justified by the public convenience and necessity as required by G.S. 62-110.1. The Commission further finds good cause to accept registration of the Facility as a new renewable energy facility. Pantego Wind shall annually file the information required by Commission Rule R8-66 on or before April 1 of each year. To the extent that Pantego Wind is not otherwise participating in a REC tracking system, it will be required to participate in the NC-RETS REC tracking system in order to facilitate the issuance of RECs. IT IS, THEREFORE, ORDERED as follows:

1. That a Certificate of Public Convenience and Necessity should be, and is hereby, granted to Pantego Wind for the construction of a wind turbine electric generating facility of up to 80 MW, consisting of wind turbines and associated equipment, in the Project Area, which is located in Beaufort County, North Carolina, subject to the following conditions:

(a) The CPCN is not intended to confer the power of eminent domain under North Carolina law for the construction of the Facility certificated herein, and Pantego Wind and its successors shall abstain from attempting to exercise any power of eminent domain under North Carolina law to construct the Facility authorized by the Certificate.

(b) The Facility shall be constructed and operated in strict accordance with all applicable laws and regulations, including the Endangered Species Act (16 USC § 1531 et seq.), the Migratory Bird Treaty Act (16 USC § 70-1 et seq.), the Bald and Golden Eagle Protection Act (16 USC § 1531 et seq.), and any environmental permitting requirements.

(c) No less than 45 days prior to erecting turbines at the facility, the Applicant shall:

(i) prepare, in consultation with the USFWS, an avian and bat protection plan, which shall include summary data and an analysis of the pre-construction bird and bat surveys conducted by the Applicant and a history of the consultation between the USFWS and the Applicant, and file the plan with the Commission;

(ii) prepare, in consultation with the USFWS, a post-construction monitoring and adaptive management plan and file the plan with the Commission;

(iii) file with the Commission a letter summarizing the Applicant's ongoing consultation with wildlife agencies and attaching the letter correspondence between the Applicant and the USFWS concerning both the avian and bat protection plan and the post-construction monitoring and adaptive management plan; and

(iv) file with the Commission an updated site layout.

(d) The Applicant shall not commence erection of turbines until the Commission has completed its review of items (i) through (iv) of condition 1(c) above and issued an order finding that these conditions have been satisfied. The Commission shall issue an order within approximately 30 days of the filing of all four of the documents required in condition 1(c) above, stating whether or not the above-stated conditions have been satisfied.

(e) The Applicant shall follow the Draft Land-Based Wind Energy Guidelines once the Guidelines are published in the Federal Register.

(f) The Applicant shall file with the Commission, on an annual basis, a letter describing the progress of any post-construction monitoring and any adaptive management strategies implemented as called for in the post-construction monitoring and adaptive management plan developed in consultation with the USFWS. The Applicant shall include with this letter a copy of its annual report to the USFWS describing the results of each year of post-construction monitoring called for in the post-construction monitoring and adaptive management plan, including, but not limited to, avian and bat fatality reports, which shall identify any dead or injured avian or bat species, location of find by turbine number and date of the find for the reporting period in accordance with the reporting protocols established by the USFWS. The Applicant shall notify the Commission and USFWS within forty-eight (48) hours of the discovery of either of the following:

(a) five or more dead or injured migratory avian or bat species;

(b) one or more dead or injured bald or golden eagle.

2. The CPCN is further subject to the conditions of Commission Rule R8-63(e) and (f), including that:

(1) The CPCN shall be subject to revocation if (a) any of the federal, State, or local licenses or permits required for construction and operation of the generating facility is not obtained or, having been obtained, is revoked pursuant to a final, non-appealable order; (b) required reports or fees are not filed with or paid to the Commission; and/or (c) the Commission concludes that the CPCN holder filed with the Commission information of a material nature that was inaccurate and/or misleading at the time it was filed; provided that, prior to revocation pursuant to any of the foregoing provisions, the CPCN holder shall be given thirty (30) days' written notice and opportunity to cure.

(2) The CPCN must be renewed if the Applicant does not begin construction within two years after the date of the Commission Order granting the certificate.

(3) A CPCN holder must notify the Commission in writing of any plans to sell, transfer or assign the CPCN and the generating facility.

(4) Progress reports, including any revisions in cost estimates, shall be submitted on an annual basis until construction is completed. The first annual progress report shall be due one year from the date of this Order.

3. That the registration by Pantego Wind of the Facility, a wind turbine electric generating facility of up to 80 MW in Beaufort County, North Carolina, as a new renewable energy facility shall be, and hereby is, accepted.

4. That Pantego Wind shall annually file the information required by Commission Rule R8-66 on or before April 1 of each year.

5. That Appendix A shall constitute the Certificate of Public Convenience and Necessity.

ISSUED BY ORDER OF THE COMMISSION.

This the 8th day of March, 2012.

NORTH CAROLINA UTILITIES COMMISSION

Patricia Swenson

Patricia Swenson, Deputy Clerk

Bh030812.01

STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. EMP-61, SUB 0

Pantego Wind Energy LLC One South Wacker Drive, Suite 1900 Chicago,Illinois 60606

is hereby issued this

CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY PURSUANT TO G.S. 62-110.1

for a 80 MW wind-powered generation facility consisting of wind turbines in the Project Area

located

in Beaufort County North Carolina,

subject to all orders, rules, regulations and conditions as are now or may hereafter be lawfully made by the North Carolina Utilities Commission.

ISSUED BY ORDER OF THE COMMISSION.

This the 8th day of March, 2012.

NORTH CAROLINA UTILITIES COMMISSION

Patricia Swenson

Patricia Swenson, Deputy Clerk

STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. SP-100, SUB 29

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of Request for a Declaratory Ruling by Bloom Energy Corporation

) ORDER ON REQUEST FOR) DECLARATORY RULING

BY THE COMMISSION: On February 13, 2012, Bloom Energy Corporation (Bloom Energy), filed a request for the Commission to issue a declaratory ruling that "Directed Biogas" is a "renewable energy resource" as that term is defined in G.S. 62-133.8(a)(8). For the purpose of this request, Bloom energy defines 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.

According to the filing, Bloom Energy is a California corporation engaged in the manufacture and sale of solid oxide fuel cell technology, colloquially referred to as the Bloom Energy Box, which functions as a distributed electricity generating unit (individually a Bloom Box or collectively, the Facility). Fuel cells are devices that convert fuel into electricity through an electro-chemical process rather than combustion. The Bloom Box can use fuel from a wide variety of sources, including liquid or gaseous hydrocarbons produced from biogenic sources.

Bloom Energy stated that it desires to market the Bloom Box to businesses that want to install and own clean, reliable power generation and earn renewable energy certificates (RECs). The electricity generated by a Bloom Box for which Directed Biogas is nominated may be used by the Facility owner or sold to a North Carolina electric power supplier. In order to earn RECs, the electricity must be generated from a renewable energy resource, and, therefore, Bloom Energy is seeking a declaration that Directed Biogas is a renewable energy resource.

In support of its request, Bloom Energy stated that, in order to be injected into natural gas pipelines, the biogas must be upgraded to pipeline quality standards. First, the biogas must be cleaned and separated to remove undesirable components such as hydrogen sulfide, chlorine, carbon dioxide, and sulfur. The upgraded biogas must also meet strict heat content and other quality requirements within a narrow band of tolerance. While natural gas standards are similar across the country, the exact standards for each pipeline are set by the company that owns the pipeline. An entity that produces biogas from a renewable energy resource (Renewable Fuel Supplier) is responsible for upgrading the biogas to meet the pipeline company's injection standards.

Bloom Energy described in its filing the process of directing and nominating biogas for a specific customer. The owner of a Facility that wishes to use biogas (Owner) contracts with a Renewable Fuel Supplier for a specific quantity of Directed Biogas. The contract between the Owner and the Renewable Fuel Supplier specifies the quantity of Directed Biogas, measured in million British thermal units (MMBtus), that corresponds to the amount of fuel to be consumed at the Facility. The agreement may be for forward haul or backhaul transportation.

Bloom Energy further stated that the volume and heat content of the injected biogas will be measured at a utility grade meter at the point of injection. Following injection, the biogas remains within the pipeline infrastructure that has an established balancing measurement system regulated by the Federal Energy Regulatory Commission. All natural gas pipeline fuel deliveries can be tracked throughout the natural gas nominations process and the associated electronic receipts for all natural gas transactions through inter- and intrastate pipelines. Gas nominations are the industry standard accounting mechanism for tracking natural gas purchases. Accordingly, the volume of Directed Biogas nominated to the Facility can be verified by invoices from a Renewable Fuel Supplier.

In its filing, Bloom Energy indicated that, similar to the commingling of electrons from any type of electric generation facility once those electrons enter the grid, Directed Biogas is commingled or merged with conventional natural gas once it is injected into the pipeline and is, therefore, indistinguishable from conventional natural gas molecules. The Directed Biogas injected and nominated for a Facility displaces an equivalent amount of conventional natural gas in MMBtus.

Bloom Energy stated that the Owner of a Facility that plans to nominate Directed Biogas for its Facility will register the Facility as a new renewable energy facility pursuant to Commission Rule R8-66. In the registration statement, the Owner will identify the source of the biogas, the precise method of reporting the volume of Directed Biogas nominated for the Facility, and the amount of electricity expected to be generated by the Facility. Generally, a third party, such as a natural gas marketer, will attest on a monthly basis the amount of Directed Biogas delivered to the pipeline by the Renewable Fuel Supplier and nominated for the Facility.

According to Bloom Energy, gas consumed by the Facility to generate electricity will be verified by the utility grade meter at the Facility and the natural gas local distribution company's monthly invoice. A revenue-grade meter will measure electricity production at the Facility. Monthly electric generation data will be used to determine the number of RECs generated by the Facility, which will be tracked through the NC-RETS REC tracking system. Only the energy generated from the Directed Biogas nominated to the Facility, as validated by a third party, will count towards the creation of RECs. On March 12, 2012, the Public Staff presented this matter to the Commission at its Regular Staff Conference, stating that it had reviewed Bloom Energy's request and recommending that the Commission issue an Order declaring that biogas derived from a renewable energy resource should be considered a renewable energy resource and should be eligible to earn RECs pursuant to G.S. 62-133.8, provided that an Owner attests to the renewable energy resource content of the biogas and provides sufficient documentation of the source and renewable energy resource content of the biogas. If the biogas is determined to be derived from both renewable energy resources and nonrenewable energy resources, the Facility would earn RECs only as provided in Commission Rule R8-67(d)(2).

The Public Staff further recommended that the Owner of a Facility that proposes to nominate Directed Biogas for the Facility must:

- 1) As part of its registration statement, attest to the renewable energy resource content of the biogas and submit documentation of the following information:
 - a. The source location and renewable energy resource content of the biogas;
 - b. The proposed method of reporting the volume of Directed Biogas nominated for the Facility; and
 - c. The proposed method to calculate the electricity generated using the Directed Biogas.
- 2) Install and use a utility grade meter at the Facility to measure the Directed Biogas consumed by the Facility and verify such consumption in the natural gas local distribution company's monthly invoice. The Facility must also use a revenue-grade meter to measure electricity production at the Facility.
- 3) Retain the documents associated with verifying the renewable energy resource content of the biogas and the Directed Biogas nomination process, including all energy output, fuel data, and any underlying documentation, calculations, and estimates for audit for at least ten years immediately following the provision of the output data to NC-RETS or another tracking system, as appropriate.

The Public Staff stressed that neither its recommendation nor the Commission's issuance of an order recognizing the eligibility of Directed Biogas for compliance with North Carolina's Renewable Energy and Energy Efficiency Portfolio Standard (REPS) should be viewed as minimizing any existing requirements for pipeline safety, expressing any statement of support or position regarding the desirability of increasing the availability of biogas in the natural gas pipeline system, or altering the quality standards of pipeline-grade natural gas in any way to accommodate biogas.

Michael Youth appeared at the Staff Conference on behalf of the North Carolina Sustainable Energy Association (NCSEA). NCSEA does not oppose the request for

declaratory ruling, but urged the Commission to require appropriate attestations, such as those adopted by the State of California, upon receipt of a future registration statement to ensure that the Directed Biogas is not "double-counted."

Discussion and Conclusions

Upon careful consideration of the facts and representations in Bloom Energy's request and the Public Staff's recommendation, the Commission concludes that Bloom Energy's request should be granted. The Commission, therefore, declares that Directed Biogas, as defined herein and in Bloom Energy's request for declaratory ruling, is a renewable energy resource.

The ultimate issue before the Commission in this request for declaratory ruling is whether the RECs earned for the electricity produced by a Facility that uses Directed Biogas are eligible for REPS compliance. For this to be the case, the gas used by the Facility must meet the definition of renewable energy resource, just as the pipeline-quality biogas injected into the pipeline by the Renewable Fuel Suppler must meet the definition. As Bloom Energy stated, once Directed Biogas is injected into the pipeline, it blends with the natural gas in the pipeline and becomes indistinguishable from conventional natural gas molecules. End users, whether the Owner of the Facility or other natural gas customers, receive gas that may or may not contain any component of the original biogas. By purchasing the Directed Biogas and nominating it for delivery to the Facility, an Owner is displacing, or offsetting, conventional natural gas that would have otherwise been injected into the pipeline. The Commission, therefore, concludes that, as long as appropriate attestations are made and records kept regarding the source and amounts of biogas injected into the pipeline and used by the Facility to ensure that no biogas is double-counted, the Directed Biogas would be a renewable energy resource and the resulting electric generation would be eligible to earn RECs that may be used for REPS compliance.

The Commission is not called upon in this proceeding to consider whether the biogas produced and supplied by the Renewable Fuel Supplier is a renewable energy resource. Rather, it is assumed in Bloom Energy's definition of Directed Biogas. As the Commission concluded in its February 29, 2008 Order Adopting Final Rules in Docket No. E-100, Sub 113, the determination of whether a resource is a renewable energy resource should be made on a case-by-case basis. As proposed by Bloom Energy and others, that determination with regard to the particular biogas at issue at that time, and the appropriate attestations, should be made when a Facility seeks registration as a renewable energy facility. Any questions regarding the adequacy of the required documentation or verification can be addressed during the Public Staff's review and the Commission's consideration of the registration statement pursuant to Commission Rule R8-66(e). 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.

Nor is the Commission called upon in this proceeding to decide whether the RECs earned would be subject to the out-of-state limitation on unbundled RECs under G.S. 62-133.8(b)(2)(e). Bloom Energy specifically requests that the Commission issue a declaratory ruling that Directed Biogas is a renewable energy resource as that term is defined in G.S. 62-133.8(a)(8). The definition of renewable energy resource is not geographically dependent, and the Commission has addressed questions of in-State versus out-of-State RECs in other orders. Bloom Energy's definition of Directed Biogas presumes that the biogas is "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," but that is irrelevant to the question of whether the Directed Biogas is a renewable energy resource.

In making its recommendation to the Commission, the Public Staff further stated that neither its recommendation nor the Commission's issuance of an order recognizing the eligibility of Directed Biogas for REPS compliance purposes should minimize any existing requirements for pipeline safety, express any statement of support or position on the desirability of increasing the availability of biogas in the natural gas pipeline system, or that the quality standards of pipeline-grade natural gas should be altered in any way to accommodate biogas. The Commission agrees.

Lastly, the Commission notes that this decision is limited to the eligibility of Directed Biogas, as defined in this Order, to be considered a renewable energy resource and should not be regarded as a precedent for any activity other than the use of Directed Biogas as requested in this case.

IT IS, THEREFORE, ORDERED that Directed Biogas, as defined herein and in Bloom Energy's request for declaratory ruling, is a renewable energy resource pursuant to G.S. 62-133.8(a)(8).

ISSUED BY ORDER OF THE COMMISSION.

This the 21^{st} day of March, 2012.

NORTH CAROLINA UTILITIES COMMISSION

Hail L. Mount

Gail L. Mount, Deputy Clerk

Bh032112.02

STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. SP-729, SUB 1

)

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of Application of W.E. Partners I, LLC, for Registration of a New Renewable **Energy Facility**

ORDER ON REQUEST FOR) DECLARATORY RULING AND NOTICE OF) INTENT TO REVOKE REGISTRATION OF NEW RENEWABLE ENERGY FACILITY

BY THE COMMISSION: On July 26, 2010, the Commission issued an Order Accepting Registration of New Renewable Energy Facility pursuant to an application made on June 17, 2010, by W.E. Partners I, LLC (WEP). WEP had filed a request to register a new renewable energy facility located in Cofield in Hertford County, North Carolina. WEP's filing stated that its proposed facility would be a cogeneration facility with two 29 MMBtu/hour wood waste-fired boilers and a 375 kW steam turbine electric generator. WEP stated further that electricity produced by the facility would be sold to Dominion North Carolina Power (Dominion) and that steam extracted from the turbine after electric power generation would be provided to Perdue Agribusiness, Inc. (Perdue), for its grain elevator operations. In its July 26, 2010 Order Accepting Registration, the Commission required WEP to participate in a renewable energy certificate (REC) tracking system and to regularly provide the system with metered generation data and thermal energy production data for the issuance of RECs.

On March 8, 2012, WEP filed a supplement to registration and request for declaratory ruling. In its filing, WEP stated that subsequent to its 2010 registration request it had changed its facility configuration and operations. WEP stated that it had increased the size of its electric generator from 375 kW to 495 kW. WEP also stated that it no longer plans to sell electricity to Dominion. WEP stated that its steam host, Perdue, uses less steam than had been anticipated, thus reducing the amount of electricity generated by the facility. WEP stated that it is generating 190 kW to 220 kW of power, and that almost all of that power (180 kW to 220 kW) is required to run the facility, leaving very little power available for other uses. WEP stated that it would be cost-prohibitive to install the interconnection equipment necessary to sell the facility's small amount of residual electric output. WEP stated further that "all electrical energy generated at WEP's facility is used at that facility." WEP requested that the Commission issue a declaratory ruling finding that its biomass-fueled facility is a combined heat and power system that remains eligible to earn RECs for its thermal energy production.

On April 2, 2012, the North Carolina Association of Professional Loggers (NCAPL) and the North Carolina Sustainable Energy Association (NCSEA) jointly filed comments supporting WEP's request. They stated that WEP's biomass-fueled facility is achieving the overriding goals of North Carolina's Renewable Energy and Energy Efficiency Portfolio

Standard (REPS) because using woody biomass as a fuel can (1) diversify the State's traditional nonrenewable fuel portfolio; (2) provide greater security through the use of indigenous resources; and (3) encourage private investment. The joint submittal stated, that "NCAPL and NCSEA support issuance of a declaratory ruling that the useful thermal energy generated at WEP's facility net of station load qualifies for thermal RECs."

On May 3, 2012, the Public Staff filed its response to WEP's supplement and declaratory order request. The Public Staff opposed WEP's request and argued that WEP should demonstrate that the facility delivers some power to an electrical supplier and thereby earns electric RECs in order for its thermal energy to be eligible for RECs. The Public Staff asserted that G.S. 62-133.8 placed the duty to comply with REPS on electric power suppliers and established a mechanism for recovering the incremental costs associated with REPS compliance through a charge on electric ratepayers. According to the Public Staff, "inherent in this structure is the principle that any facility that qualifies for RECs should provide a benefit to electric ratepayers by delivering at least some power generated by a renewable energy resource to an electric power supplier and displacing procedures, the Public Staff argued that the definition of station service, commonly referred to as station power, must be considered a determining factor for both electric and thermal energy to be deemed eligible for RECs.

In the Public Staff's view, all of the electric output of WEP's facility will be used for station service, making it ineligible for electric RECs. In addition, the Public Staff cited the Commission's March 13, 2012 Order in Dockets No. SP-100, Sub 9 and SP-967, Sub 0 which state that a combined heat and power (CHP) facility "must be an electricity generating facility in a 'real sense,' and not simply a boiler masquerading as a CHP." That Order stated that "some electric power must be generated in excess of station power" in order for the facility to qualify as a combined heat and power facility, and hence be eligible for thermal RECs. The Public Staff noted that WEP asserts that some of its electric output, about 10 kW, is used for lighting, office equipment, heating, and air conditioning rather than for station service. The Public Staff disagreed that this output would be eligible for RECs, citing the fact that WEP delivers no electricity to an electric power supplier. Finally, the Public Staff recommended that the Commission accept WEP's supplement to registration, but deny the request for a declaratory ruling that the facility's useful thermal energy qualifies for thermal RECs.

On May 18, 2012, WEP filed reply comments to the Public Staff's response. WEP stated that there is no statutory requirement that the electricity generated by a renewable energy facility be sold to a third party in order for its thermal energy to be eligible for RECs. Further, WEP argued that its biomass-fueled facility, as defined by statute, is a new renewable energy facility because it uses a renewable energy resource. WEP explained that its biomass-fueled facility displaced electric generation from non-renewable resources because Perdue has been able to put its own fossil-fueled boiler on standby and thereby reduce its own electric demand by about 110 kW since WEP's facility came online. "Thus, while WEP is not providing electricity to Perdue, the net effect of bringing the WEP facility online is that Perdue's demand for electrical energy has been reduced" Therefore, WEP asserted that its facility addresses the overarching objective of REPS.

In its reply comments WEP also opposed the Public Staff's position that the definition of station service be a determining factor relative to whether its thermal energy is eligible for RECs. In that regard, WEP argued that its facility's approval as a new renewable energy facility pre-dated the Commission's January 31, 2011 adoption of the NC-RETS Operating Procedures in which station service is defined and excluded from REC issuance. WEP asserted that because the prohibition on issuing RECs for power used for station service was not yet established when WEP filed its registration application, that prohibition should not be a factor in the Commission's decision at this time. Further, WEP contended that Commission Rule R8-66(b)(1)(iii), by requiring an applicant to state "whether it produces electricity, useful thermal energy, or both," shows that the requirement of supplying both electric generation and thermal energy was not the intention of the Commission. Finally, WEP requested that the Commission issue a declaratory ruling that the useful thermal energy generated at its biomass-fueled facility remains eligible to earn RECs.

DISCUSSION AND CONCLUSIONS

WEP's request and the Public Staff's response raise several issues. First is the issue of station service and whether the definition and prohibition in the NC-RETS Operating Procedures should apply to WEP's facility. WEP's submittals state that WEP's facility produces up to 220 kW of electricity and immediately consumes almost all of that electrical power, with a small amount being used on site for lighting, heating, cooling and ventilation. Therefore, the facility's only energy product is the steam that it provides to Perdue.

The Commission's July 1, 2010 Order Adopting Interim Operating Procedures for REC Tracking System, issued in Docket No. E-100, Sub 121, defined station service as follows:

Station Service is the portion of electricity or thermal energy produced by a Renewable Energy Facility that is immediately consumed at that same facility in order to power the facility's pumps, etc., or to process fuel. Such energy is not eligible for issuance of Certificates.

This policy is intended to ensure that renewable energy facilities produce more electric energy than they consume. Only the net output, that is, the output that is available to serve other needs beyond operating the facility, is eligible for the issuance of RECs.

Further clarifying the importance of electricity production in excess of station service, Commission Rule R8-66(b)(1)(viii) requests that facilities already in operation provide the amount of energy produced "net of station use" in their initial registration statement. WEP contends that Commission Rule R8-66(b)(1)(iii), by requiring an applicant to state "whether it produces electricity, useful thermal energy, or both," shows that the Public Staff's argument, that the facility must produce and supply both electricity and thermal energy, adds a non-existent requirement. However, Commission Rule R8-66(b)(1)(iii) is not only applicable to CHP facilities, but rather to all renewable energy facilities, including solar thermal facilities, which, unlike a CHP facility, are not required to produce electricity by statute.

WEP's contention, that the application of rules requiring electricity production to exceed station service to be registered as a new renewable energy facility constitutes an unfair retroactive application of new rules, is without merit. In its request, WEP stated that its initial registration statement advised the Commission that "the Net Electricity (electricity in excess of internal plant requirements) ... would be sold to Dominion North Carolina Power." In addition, WEP's request stated that "the quantity of electric RECs projected in WEP's registration statement was based on the estimated gross electrical output of the facility as then planned." However, the initial registration statement does not identify that only "Net Electricity" will be sold to Dominion North Carolina, stating only that the facility will "provide electricity to Dominion Power." In addition, the initial registration statement estimates the expected RECs generated as 2,098 electric RECs, citing the definition in G.S. 62.133.8(a)(6), that such electricity or energy is "supplied by a renewable energy facility," in the explanation of the calculation. Based on the initial registration statement there was no basis for the Commission to conclude that WEP would not be producing electricity in excess of station service. This new information constitutes a significant change in WEP's registration statement, and, thus, the Commission must reconsider the request under currently established rules.

Furthermore, the policy that only the net output is eligible for the issuance of RECs pre-dates the Commission's July 26, 2010 Order Accepting Registration of WEP's facility. 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." Gross electricity used to power the facility itself cannot be considered electricity "supplied by a renewable energy facility" as required for the issuance of RECs by G.S. 62.133.8(a)(6).

WEP contends that its behind the meter electric output of about 10 kW used for lighting, office equipment, heating, and air-conditioning is net output in excess of station service. The Commission disagrees. The onsite electric needs would not exist but for the generator. The Commission considers this type of behind the meter use to be station service as it "is immediately consumed at that same facility in order to power the facility's pumps, etc., or to process fuel." The 10 kW in dispute may not directly "power the facility's pumps" or "process fuel;" however, the inclusion of "etc." in the definition indicates that station service broadly includes other uses of electricity at the generating facility, not solely the two specifically listed. The Commission interprets this definition 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. This interpretation is consistent with the Federal Energy Regulatory Commission's definition of station service. PJM Interconnection, LLC, 94 FERC ¶ 61,251 at 61,889 (2001), clarified and reh'g denied, 95 FERC ¶ 61,333 (2001) (defining "station power" to include the "electric energy used for the heating, lighting, air-conditioning, and office equipment needs of the buildings on a generating facility's site"); see also, Occidental Geothermal, Inc., 17 FERC ¶ 61,231 at 61,445 (1981).

The Public Staff asserted that electricity must be delivered to an electric power supplier in order to be eligible for RECs. The Commission disagrees. G.S. 62-133.8(b)(2)(e) allows electric power suppliers to comply with REPS by, among other things, purchasing renewable energy certificates "derived from" renewable energy facilities. The Commission has approved renewable energy facility registrations for numerous small solar facilities whose owners use the power directly rather than selling it to an electric power supplier. In addition, Commission Rule R8-67(g)(3) addresses large renewable energy facilities that are interconnected on the customer's side of the utility meter. There is no requirement that a renewable energy facility's output be sold or delivered to an electric power supplier in order to be eligible for the issuance of RECs. However, as discussed above, the electric use must be net of station service in order to be eligible for the issuance of RECs.

As regards the issue of whether WEP's facility meets the statutory definition of a combined heat and power facility that is eligible to earn RECs, the Commission agrees with the Public Staff that this is not the case. G.S. 62-133.8(a)(7)(b) requires that a combined heat and power facility must generate "useful, measureable combined heat and power derived from a renewable energy resource" in order to be eligible for REC issuance pursuant to REPS. This a two-part standard: the facility must produce both electric and thermal energy, and both must be useful and measurable. Although WEP's facility uses a renewable resource, it does not meet the two-part definition set out in G.S. 62-133.8(a)(7)(b) because it consumes all of the electricity that it generates. Based on the record, the Commission finds that none of the facility's energy output is eligible for REC issuance. Therefore, the Commission concludes that it is necessary to pursue revocation of the facility's registration as a new renewable energy facility.

Based upon the foregoing and the entire record in this proceeding, the Commission hereby: (1) denies WEP's request for a declaratory ruling that the useful thermal energy generated at its biomass-fueled facility remains eligible to earn RECs and (2) notices the Commission's intent to revoke the registration of WEP's biomass-fueled facility as a new renewable energy facility effective August 24, 2012.

IT IS, THEREFORE, SO ORDERED.

ISSUED BY ORDER OF THE COMMISSION.

This the <u>10th</u> day of August, 2012.

NORTH CAROLINA UTILITIES COMMISSION

Patricia Swenson

Patricia Swenson, Deputy Clerk

Bh081012.01

STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. SP-729, SUB 1

)

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of Application of W.E. Partners I, LLC, for Registration of a New Renewable **Energy Facility**

ORDER ON REQUEST FOR DECLARATORY) RULING AND NOTICE OF INTENT TO REVOKE **REGISTRATION OF NEW RENEWABLE**)) ENERGY FACILITY

BY THE COMMISSION: On July 26, 2010, the Commission issued an Order Accepting Registration of New Renewable Energy Facility pursuant to an application made on June 17, 2010, by W.E. Partners I, LLC (WEP) for a facility located in Cofield in Hertford County, North Carolina. WEP's filing stated that its proposed facility would be a combined heat and power (CHP) facility with two 29 MMBtu/hour wood waste-fired boilers and a 375 kW steam turbine electric generator. WEP stated further that electricity produced by the facility would be sold to Dominion North Carolina Power (Dominion) and that steam extracted from the turbine after electric power generation would be provided to Perdue Agribusiness, Inc. (Perdue), for its grain elevator operations.

On March 8, 2012, WEP filed a supplement to registration and request for declaratory ruling. In its filing, WEP stated that subsequent to its 2010 registration request it had changed its facility configuration and operations. WEP stated that it no longer plans to sell electricity to Dominion. WEP stated that its steam host, Perdue, uses less steam than had been anticipated, thus reducing the amount of electricity generated by the facility. WEP stated that it is generating 190 kW to 220 kW of power, and that almost all of that power (180 kW to 220 kW) is required to run the facility. WEP stated that it would be cost-prohibitive to install the interconnection equipment necessary to sell the facility's small amount of residual electric output. WEP stated further that "all electrical energy generated at WEP's facility is used at that facility." WEP requested that the Commission issue a declaratory ruling finding that its biomass-fueled facility is a CHP system that remains eligible to earn RECs for its thermal energy production.

On April 2, 2012, the North Carolina Association of Professional Loggers (NCAPL) and the North Carolina Sustainable Energy Association (NCSEA) jointly filed comments supporting WEP's request. On May 3, 2012, the Public Staff filed its response to WEP's supplement and declaratory order request. The Public Staff opposed WEP's request and argued that WEP should demonstrate that the facility delivers some power to an electrical supplier and thereby earns electric RECs in order for its thermal energy to be eligible for RECs. Further, citing the NC-RETS Operating Procedures, the Public Staff argued that the definition of station service must be considered a determining factor for both electric and thermal energy to be deemed eligible for RECs. In the Public Staff's view, all of the electric output of WEP's facility will be used for station service, making it ineligible for electric RECs.

The Public Staff noted that WEP asserts that some of its electric output, about 10 kW, is used for lighting, office equipment, heating, and air conditioning rather than for station service. The Public Staff disagreed that this output would be eligible for RECs, citing the fact that WEP delivers no electricity to an electric power supplier.

On May 18, 2012, WEP filed reply comments to the Public Staff's response. WEP stated that there is no statutory requirement that the electricity generated by a renewable energy facility be sold to a third party in order for its thermal energy to be eligible for RECs. WEP also opposed the Public Staff's position that the definition of station service be a determining factor relative to whether its thermal energy is eligible for RECs. In that regard, WEP argued that its facility's approval as a new renewable energy facility pre-dated the Commission's January 31, 2011 adoption of the NC-RETS Operating Procedures in which station service is defined and excluded from REC issuance. Finally, WEP requested that the Commission issue a declaratory ruling that the useful thermal energy generated at its biomass-fueled facility remains eligible to earn RECs.

On August 10, 2012, the Commission issued an Order on Request for Declaratory Ruling and Notice of Intent to Revoke Registration of New Renewable Energy Facility that denied WEP's request and noticed the Commission's intent to revoke the registration of WEP's biomass-fueled facility as a new renewable energy facility effective August 24, 2012. The Commission determined that the definition of "station service" applied to WEP's facility. The Commission also disagreed with WEP's contention that 10 kW used on site to power the heating, air-conditioning, and lighting did not constitute "station service." 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. Finally, the Commission disagreed with the Public Staff's contention that electricity must be delivered to an electric power supplier in order to be eligible for RECs. The Commission concluded that WEP's facility did not meet the two-part definition of a CHP facility in G.S. 62-133.8(a)(7)(b) because it consumes all of the electricity that it generates, and thus did not produce useful and measurable power. The Commission therefore found that none of the facility's energy output was eligible for REC issuance.

On August 23, 2012, WEP filed a letter with the Commission updating the Commission to changes at its facility and requesting that the Commission "provide an opinion as quickly as possible" on a new facility setup under consideration. WEP stated that it intends to establish interconnection with Dominion if necessary. However, WEP requested that the Commission consider an alternative that would allow WEP to avoid the high interconnection costs associated with exporting a minimal amount of electricity. WEP proposes to donate its excess electric energy, free of charge, to its steam host for use in powering a water pump. WEP contends that in such a scenario it would not be a public utility, as defined in G.S. 62-3(23)a.1, because the electricity would not be sold "for compensation." WEP contends that under this scenario it would be producing useful and measurable electric and thermal energy and, thus, would qualify as a CHP facility for the issuance of RECs.

On August 27, 2012, the Commission issued an Order Requesting Comments and Delaying Revocation. The Commission stated that it would treat WEP's August 23, 2012 letter as a motion for a further declaratory ruling. The Commission requested that the Public Staff and any other interested parties provide comments on WEP's motion by September 4, 2012. Finally, the Commission noticed its intent to delay the revocation of WEP's registration as a new renewable energy facility until an Order on the further motion had been issued.

On September 4, 2012, the Public Staff filed its response to the Commission's August 27, 2012 Order and WEP's August 23, 2012 motion for a further declaratory ruling. The Public Staff disagreed with WEP's position that by giving away the electricity it produces to its steam host, Perdue, it would not meet the definition of a public utility in G.S. 62-3(23)a.1, because it would not be doing so "for compensation." In the Public Staff's view, "[t]he question of compensation for the electric service ... cannot be looked at in isolation." The Public Staff notes that WEP leases the property on which the facility is located and has an existing steam purchase contract with Perdue. The scenario presented by WEP may "create a slippery slope" in the view of the Public Staff, continuing that "[i]f third parties are allowed to furnish electric service as non-utilities when the transaction is without such direct compensation, the party receiving the service will often have a strong incentive to provide hidden or indirect compensation to the party providing the service." The Public Staff noted that WEP did not meet the exemption to the definition of public utility in G.S. 62-3(23)a.1 for "persons who construct or operate an electric generating facility, the primary purpose of which facility is for such person's own use and not for the primary purpose of producing electricity, heat, or steam for sale to or for the public for compensation." Finally, the Public Staff indicated that the scenario proposed by WEP may be considered a "boiler masquerading as a CHP" as described by the Commission's March 13, 2012 Order on Public Staff's Motion for Reconsideration in Docket Nos. SP-100, Sub 9 and SP-967, Sub 0.

On September 4, 2012, NCSEA filed comments in response to the Commission's August 27, 2012 Order and in support of WEP's August 23, 2012 motion for a further declaratory ruling. NCSEA stated that because WEP "does not receive compensation for the delivered electricity, WEP should not be considered a public utility." NCSEA further stated that under such scenario WEP's facility would then meet the definition of a CHP facility. Finally, NCSEA addressed concerns that WEP would be "gaming the system" stating that WEP's facility would achieve many of the goals of the REPS through fuel portfolio diversification, use of indigenous resources, and private investment.

DISCUSSION AND CONCLUSIONS

For the issues presented in WEP's motion for a further declaratory ruling to be relevant, WEP's facility must first be producing electricity net of "station service," as defined in the Commission's July 1, 2010 Order Adopting Interim Operating Procedures for REC Tracking System, issued in Docket No. E-100, Sub 121, and further clarified in the Commission's August 10, 2012 Order on Request for Declaratory Ruling and Notice of Intent to Revoke Registration of New Renewable Energy Facility in this docket. Were

WEP to export 10 kW and then purchase 10 kW back from an electric power supplier to run the heating, air conditioning, and lighting at its generation facility, it would be irrelevant whether WEP was selling the 10 kW to Dominion or providing it free of charge to Perdue, as the facility would still not be producing electricity above "station service." Assuming that WEP's facility will be producing electricity net of "station service," either by increasing its electrical output or decreasing its station load, WEP's motion and the Public Staff's response raise several issues. The primary issue is whether WEP's proposal to donate its electrical output, free of charge, to Perdue, would allow WEP's facility to avoid classification as a public utility as defined in G.S. 62-3(23)a.1.

The Commission agrees with the Public Staff that such a scenario does not exempt WEP from regulation as a public utility under G.S. 62-3(23)a.1. WEP has existing financial arrangements with Perdue; it would be impossible for the Commission to identify if compensation for electricity provided "free of charge" could exist in other financial agreements between an electric generator and a third party. The Commission agrees with the Public Staff that the question of compensation for the electric service cannot be looked at in isolation. In the proposed scenario an electric generating facility would, theoretically, be recovering the cost of its electric production, whether through the sale of steam or through other financial mechanisms; otherwise, there would be no financial incentive for such a project. A generator could build this cost recovery into other contracts with the third party and, as the Public Staff notes, "the party receiving the service will often have a strong incentive to provide hidden or indirect compensation to the party providing the service." The Commission has previously interpreted G.S. 62-3(23)a to provide that a sale of electricity (or steam with which to generate electricity) to a single customer would constitute a sale to or for the public. See, e.g., Order Denying Petition for Declaratory Ruling, Docket No. SP-100, Sub 7 (1996). Additionally, there is a statutory exemption in the definition of a public utility in G.S. 62-3(23)a.1 for "persons who construct or operate an electric generating facility, the primary purpose of which facility is for such person's own use and not for the primary purpose of producing electricity, heat, or steam for sale to or for the public for compensation." This exemption does not apply under the proposed circumstances since WEP will be providing the electrical output to Perdue, rather than generating it for its own use.

WEP proposes to produce electricity and provide it free of charge to a third party with which it has existing and future financial arrangements. The Commission finds that, because compensation could be built into the financial arrangements with Perdue and because WEP could recover the costs of its electric generation, that the proposed scenario 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. Thus, WEP would be classified as a public utility. Were the Commission to rule otherwise it would open a Pandora's box of 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.

Based upon the foregoing and the entire record in this proceeding, the Commission hereby: (1) denies the relief WEP requests in its petition for a declaratory ruling that furnishing electricity free of charge to its steam host, Perdue, assuming that WEP is generating power in excess of station service, would allow WEP's facility to be considered a CHP and, therefore, eligible to earn RECs for both its thermal and electric generation, and not be subject to regulation as a public utility under G.S. 62-3(23)a.1; (2) notices the Commission's further intent to revoke the registration of WEP's biomass-fueled facility as a new renewable energy facility effective September 28, 2012, unless the Commission receives an amended registration statement from WEP indicating that WEP will produce electricity in compliance with this Order and demonstrating that WEP will produce electricity net of "station service."

IT IS, THEREFORE, SO ORDERED.

ISSUED BY ORDER OF THE COMMISSION.

This the 17^{th} day of September, 2012.

NORTH CAROLINA UTILITIES COMMISSION

Aail L. Mount

Gail L. Mount, Chief Clerk

Bh091712.05

STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. E-100, SUB 130 DOCKET NO. SP-211, Sub 1 DOCKET NO. SP-211, Sub 2 DOCKET NO. SP-297, Sub 0 DOCKET NO. SP-297, Sub 1 DOCKET NO. SP-396, Sub 0 DOCKET NO. SP-1041, Sub 0 DOCKET NO. SP-1041, Sub 1 DOCKET NO. SP-1041, Sub 2 DOCKET NO. SP-1108, Sub 0 DOCKET NO. SP-1270, Sub 1

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-100, SUB 130)
In the Matter of Revocation of Registrations of Renewable Energy Facilities and New Renewable Energy Facilities Pursuant to Rule R8-66(f) – 2012)))
DOCKET NO. SP-211, Sub 1 In the Matter of Application of Megawatt Solar, Inc., for Registration of a New Renewable Energy Facility)))) ORDER REVOKING) REGISTRATION OF
DOCKET NO. SP-211, Sub 2 In the Matter of Application of Megawatt Solar, Inc., for Registration of a New Renewable Energy Facility DOCKET NO. SP-297, Sub 0 In the Matter of) RENEWABLE) ENERGY) FACILITIES AND) NEW RENEWABLE) ENERGY FACILITIES)
Application of Orbit Energy, Inc., for Registration of a New Renewable Energy Facility))
DOCKET NO. SP-297, Sub 1 In the Matter of Application of Orbit Energy, Inc., for Registration of a New Renewable Energy Facility	/)))
DOCKET NO. SP-396, Sub 0)

In the Matter of Application of Peregrine Biomass Development Company, LLC, for Registration of a New Renewable Energy Facility)))
DOCKET NO. SP-1041, Sub 0 In the Matter of Application of CH4 Power, Inc., for Registration of a New Renewable Energy Facility)))
DOCKET NO. SP-1041, Sub 1 In the Matter of Application of CH4 Power, Inc., for Registration of a New Renewable Energy Facility))) ORDER REVOKING) REGISTRATION OF) RENEWABLE) ENERGY
DOCKET NO. SP-1041, Sub 2) FACILITIES AND
In the Matter of) NEW RENEWABLE
Application of CH4 Power, Inc., for Registration of a) ENERGY FACILITIES
New Renewable Energy Facility)
DOCKET NO. SP-1108, Sub 0)
In the Matter of)
Application of North Carolina Renewable Energy, LLC,)
for Registration of a New Renewable Energy Facility)
DOCKET NO. SP-1270, Sub 1	/
In the Matter of)
Application of George and Ann Costello for)
Registration of a New Renewable Energy Facility)

BY THE COMMISSION: On May 30, 2012, the Commission issued an Order giving notice of its intent to revoke the registration of one hundred-twelve 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 ten new renewable energy facilities listed in Appendix-A did not complete their annual certifications on or before July 1, 2012, as required by the Commission's May 30, 2012 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 ten facilities listed in Appendix-A effective July 1, 2012.

IT IS, THEREFORE, ORDERED as follows:

1. That the registrations previously approved by the Commission for the ten facilities listed in Appendix-A shall be, and are hereby, revoked effective July 1, 2012.

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

3. That the NC-RETS Administrator shall not allow any NC-RETS account holder to import from the 10 facilities listed in Appendix-A renewable energy certificates (RECs) that are dated July 2012 or later.

3. That any RECs dated July 2012 or later earned by one of the facilities listed in Appendix-A 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.

4. 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 pursuant to Rule R8-66.

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

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

ISSUED BY ORDER OF THE COMMISSION.

This the <u>26th</u> day of September, 2012.

NORTH CAROLINA UTILITIES COMMISSION

Patricia Swenson

Patricia Swenson, Deputy Clerk

Kh092512.01

APPENDIX-A

2012 Revocations Docket No. E-100, Sub 130 Renewable Energy Facilities and New Renewable Energy Facilities <u>Effective July 1, 2012</u>				
Docket No.	Facility Owner	Facility Name	State	
SP-211, Sub 1	MegaWatt Solar, Inc.	MegaWatt Solar	NC	
SP-211, Sub 2	Megawatt Solar, Inc.	Megawatt Solar / Piedmont	NC	
SP-297, Sub 0	Orbit Energy, Inc.	Orbit Energy Clinton Facility	NC	
SP-297, Sub 1	Orbit Energy, Inc.	Orbit Energy Charlotte Facility	NC	
SP-396, Sub 0	Peregrine Biomass Dev. Co.	Hartsville Paper	SC	
SP-1041, Sub 0	CH4 Power Inc.	Foster Farms Digester Power Plant	CA	
SP-1041, Sub 1	CH4 Power Inc.	Olivera Digester Power Plant	CA	
SP-1041, Sub 2	CH4 Power Inc.	Foster Farms Phase 2	CA	
SP-1108, Sub 0	North Carolina Renewable Energy, LLC	North Carolina Renewable Energy, LLC	NC	
SP-1270, Sub 1	George and Ann Costello	Costello Residence	NC	