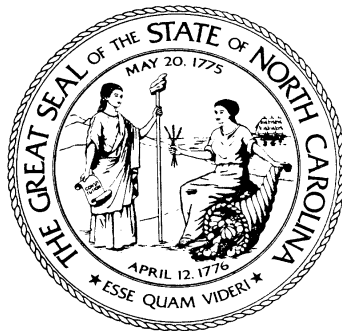


**ANNUAL REPORT REGARDING
RENEWABLE ENERGY AND ENERGY EFFICIENCY
PORTFOLIO STANDARD IN NORTH CAROLINA
REQUIRED PURSUANT TO N.C.G.S. § 62-133.8(j)**

DATE DUE: OCTOBER 1, 2021

SUBMITTED: OCTOBER 1, 2021

**RECEIVED BY
THE GOVERNOR OF NORTH CAROLINA;
THE ENVIRONMENTAL REVIEW COMMISSION;
THE JOINT LEGISLATIVE OVERSIGHT COMMITTEE
ON AGRICULTURE AND NATURAL AND ECONOMIC
RESOURCES; THE SENATE APPROPRIATIONS
COMMITTEE ON AGRICULTURE, NATURAL, AND
ECONOMIC RESOURCES; AND THE CHAIRS OF THE
HOUSE OF REPRESENTATIVES APPROPRIATIONS
COMMITTEE ON AGRICULTURE AND NATURAL AND
ECONOMIC RESOURCES**



**SUBMITTED BY
THE NORTH CAROLINA UTILITIES COMMISSION**

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EXECUTIVE SUMMARY

In August 2007, North Carolina enacted legislation, Session Law 2007-397 (Senate Bill 3), that, 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 N.C. Gen. Stat. § 62-133.8(j), the Commission is required to report by October 1 of each year to the Governor; the Environmental Review Commission; the Joint Legislative Oversight Committee on Agriculture and Natural and Economic Resources; the Senate Appropriations Committee on Agriculture, Natural, and Economic Resources; and the chairs of the House of Representatives Appropriations Committee on Agriculture and Natural and Economic Resources on the activities taken by the Commission to implement, and by electric power suppliers to comply with, the REPS requirement.

Electric Power Supplier Compliance

The REPS requires electric power suppliers, beginning in 2012, to meet an increasing percentage of their retail customers' energy needs by a combination of renewable energy resources and energy reductions from the implementation of energy efficiency (EE) and demand-side management (DSM) measures. In addition, as of 2010, each electric power supplier must meet a certain percentage of its retail electric sales with solar renewable energy credits (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

The Commission monitors compliance with the REPS requirements 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(a)(5), electric power suppliers may employ the services of a utility compliance aggregator to assist it in demonstrating its compliance with the REPS through, among other things, the filing of REPS compliance plans or reports and participating in NC-RETS on behalf of an electric power supplier. Pursuant to Commission Rule R8-67(b), on or before September 1 of each year, each electric power supplier, or its utility compliance aggregator, 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, or its utility compliance aggregator, 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.

Since the Commission's 2020 report, the Commission has issued orders, scheduled a technical conference regarding the 2019 REPS compliance reports filed by DEP, DEC, and Dominion, and required each public electric utility to file updated 2020 REPS compliance reports and 2021 compliance plans. Also since the Commission's 2020 report, the Commission has issued orders approving REPS compliance reports and accepting REPS compliance plans filed by North Carolina Electric Municipal Corporation (NCWEMC), EnergyUnited, Tennessee Valley Authority (TVA), Fayetteville Public Works Commission (FPWC), the Town of Waynesville (Waynesville), Carolina Power Partners, LLC (CCP), North Carolina Eastern Municipal Power Agency (NCEMPA), and North Carolina Municipal Power Agency Number 1 (NCMPA1).

Cost Recovery Rider

Section 62-133.8(h) of the North Carolina General Statutes 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 N.C.G.S. § 62-133.2 and is subject to an annual true-up.

Since the Commission's 2020 report, the Commission has issued orders approving REPS cost recovery rider charges for DEP, DEC, and Dominion based upon the Commission's determination that the incremental costs to comply with the REPS requirements and to fund research were reasonably and prudently incurred and below the statutory spending limit, and that the rider charges were less than the limits established in N.C.G.S. § 62-133.8(h)(4).

2021 Legislation

In 2021, the General Assembly has not passed any legislation amending the REPS.

Commission Implementation

Rulemaking Proceeding

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

Since issuing the 2008 order adopting rules to implement Senate Bill 3, the Commission has issued several orders interpreting various REPS provisions, including the following orders issued after presenting the 2020 REPS report to the General Assembly:

- On December 30, 2020, the Commission issued an Order Modifying the Swine Waste Set-Aside Requirements and Providing Other Relief. The order concluded that the EMCs and Municipalities (Munis) made a reasonable effort to comply with the 2020 statewide swine waste set-aside requirement but will not be able to comply. Compliance with the swine waste set-aside requirements has been hindered by the fact that the technology of power production from swine waste continues to face challenges and that swine waste-to-energy projects continue to experience operational difficulties. The Commission also concluded that it is in the public interest to delay entirely the 2020 swine waste set-aside requirements for one additional year for the EMCs and Munis. The Commission allowed the EMCs and Munis that have acquired swine waste RECs for 2020 REPS compliance to bank such RECs for swine waste set-aside compliance in future years and allowed the EMCs and Munis to replace compliance with the swine waste set-aside requirement in 2020 with other compliance measures in accordance with N.C.G.S. § 62-133.8(b), (c), and (d). The Commission required the EMCs and Munis, or their utility compliance aggregator, to file with the Commission a one-time compliance plan detailing the efforts and actions they intend to take to comply with the swine waste set-aside requirements for 2021 and future years. The Commission cautioned the EMCs and Munis that they are mandated to use reasonable efforts, which include consideration of novel technologies and different

approaches, to comply with the swine waste set-aside requirement for compliance in 2021.

The order resulted in the following updated compliance schedules for the swine waste set-aside REPS requirements for EMCs and Munis:

Calendar Year	Requirement for Swine Waste Resources
2020	0.00%
2021	0.07%
2022-2024	0.14%
2025 and thereafter	0.20%

- On May 11, 2021, the Commission issued an order granting Duke Energy Carolinas, LLC (DEC) and Duke Energy Progress, LLC (DEP), (jointly Duke) a waiver of NC-RETS' one-year limit on prior period adjustments and allowing Duke to update their 2017-2020 RECs accounts to remove RECs previously and incorrectly associated with net-metering non-time-of-use customers and retire an equivalent quantity of RECs from its surplus of general RECs in its accounts to cover the shortfall.
- On June 11, 2021, following a lengthy audit by the Public Staff, the Commission issued an order accepting Storm Hogs Power Partners, LLC's updated REC multi-fuel calculations and allowing it to amend its swine waste RECs, poultry waste RECs, and general biomass waste RECs earned from August 2017 through September 2019. As a result of the order, Duke, as purchaser of the RECs, experienced a loss of 1515 swine RECs which were reclassified as general biomass RECs in its NC-RETS account.

Renewable Energy Facilities

Senate Bill 3 defines certain electric generating facilities as "renewable energy facilities" or "new renewable energy facilities." Renewable energy certificates (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 N.C.G.S. § 62-133.8(b) and (c).

In its rulemaking proceeding, the Commission adopted rules providing for certification or reports of proposed construction and registration of renewable energy facilities and new renewable energy facilities. As of August 31, 2021, the Commission has accepted registration statements filed by 1440 facilities. A list of these facilities, along with other information, may be found on the Commission's website at: <https://www.ncuc.net/Reps/reps.html>.

In addition, since the 2020 REPS report was presented, the Commission has issued additional orders addressing issues related to the registrations of a renewable energy facility or new renewable energy facility, including the following:

- On March 15, 2021, the Commission issued an order revoking the registrations of 21 facilities registered with the Commission as renewable energy facilities or as new renewable energy facilities. The owners of the 21 facilities did not complete their annual certifications on or before October 1, 2020, as required by the Commission's August 31, 2020 order, nor had an annual certification been completed for these facilities as of the date of the order. The order states that should the owner of a facility whose registration has been revoked wish to have the energy output from its facility become eligible for compliance with the REPS, the owner must again register the facility with the Commission.
- On September 16, 2021, the Commission issued an order giving notice of its intent to revoke the registration of 23 renewable energy facilities and 116 new renewable energy facilities because their owners had not completed or filed the annual certifications required each April 1, as detailed in Commission Rule R8-66(b). Facility owners were given until October 15, 2021, to file their annual certifications belatedly. Owners that do not complete the annual certifications face their facility's registrations being revoked pursuant to Commission Rule R8-66(f). This matter is pending before the Commission.

North Carolina Renewable Energy Tracking System (NC-RETS)

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

On February 2, 2010, after evaluating the bids received in response to a request for proposals (RFP), the Commission signed a Memorandum of Agreement (MOA) with APX, Inc. (APX), to develop and administer an online REC tracking system for North Carolina, NC-RETS. APX successfully launched NC-RETS on July 1, 2010, and by letter dated September 3, 2010, the Commission accepted the system and authorized APX to begin billing users pursuant to the MOA. The original MOA with APX expired on December 31, 2013. Based on the feedback received from the stakeholders, the Commission extended the MOA with APX through December 31, 2017, and again through December 31, 2021. Since the 2020 REPS Report was presented, the Commission extended the MOA through December 31, 2025.

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 2010-2020 REPS solar set-aside requirements, the 2019-2020 poultry waste set-aside requirement, and the 2012-2020 REPS general requirements. Lastly, the Commission has established an ongoing NC-RETS stakeholder group, providing a forum for resolution of issues and discussion of system improvements.

Environmental Impacts

Pursuant to N.C.G.S. § 62-133.8(j), the Commission is directed to consult with the North Carolina Department of Environmental Quality (DEQ) 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 DEQ, any public comments regarding direct, secondary, and cumulative environmental impacts of the implementation of the REPS provision of Senate Bill 3. DEQ, in response to the Commission's request, notes that the REPS has provided remarkable benefits to the citizens of North Carolina and provides an update on renewable energy projects, benefits of the REPS, and associated impacts on North Carolina's air, water, and land quality. DEQ's full response is attached to this report as a part of Appendix 1.

Wholesale Providers Meeting REPS Requirements

DEC continues to meet the REPS requirements for Rutherford EMC; Blue Ridge EMC; and the towns of Dallas, Forest City, and 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. NCEMC indicates that the Town of Oak City is a wholesale customer of Edgecombe-Martin County EMC; the Town of Enfield is a wholesale customer of Halifax EMC; and the Town of Fountain is a wholesale customer of Pitt & Greene EMC and the towns' REPS requirements are included as part of the requirements of their respective EMCs reporting to NCEMC for REPS compliance.

Conclusions

All electric power suppliers have met the 2012-2020 general REPS requirements and appear on track to meet the 2021 general REPS requirements. All electric power suppliers have met the 2012-2020 solar set-aside requirements and appear to be on track to meet the 2021 solar set-aside requirement. The Commission granted a joint motion to delay implementation of the 2020 swine waste set-aside requirement for one year for the EMCs and Munis. The electric public utilities met the 0.07% swine waste set-aside for 2020. The Commission's December 16, 2019, modification order reduced the poultry waste set-aside requirements for 2020 for all electric power suppliers to 700,000 MWh. All electric power suppliers met the poultry waste set-aside requirements for 2020. Most EMCs and Munis have indicated that they will have difficulty meeting the swine waste set-aside requirements for 2021 and that they may request a modification in these requirements for 2021, as well as a delay in future increases in these requirements. Electric power suppliers cite the lack of technological progress for power production from swine waste and failure of counter parties to deliver RECs

as anticipated as impediments to meeting future swine waste set-aside requirements. DEC, DEP and Dominion indicated that their ability to comply with future swine waste set-aside requirements is hindered by numerous, persistent difficulties experienced by swine waste-to-energy facilities, but continue to engage in a variety of actions to procure or develop swine waste-to-energy resources to meet their future requirements, including: negotiations for in-state and out-of-state supplies; working extensively with potential suppliers to overcome production risks and amend contracts to accommodate changing circumstances; searching the broker market for out-of-state RECs; and pursuing new biomass and biogas swine resource options; among other efforts.

BACKGROUND

In August 2007, North Carolina enacted comprehensive energy legislation, Session Law 2007-397 (Senate Bill 3), which, among other things, established a Renewable Energy and Energy Efficiency Portfolio Standard (REPS), the first renewable energy portfolio standard in the Southeast. Under the REPS, all electric power suppliers in North Carolina must meet an increasing amount of their retail customers' energy needs by use of 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 N.C.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 Oversight Committee on Agriculture, Natural, and Economic Resources, the Senate Appropriations Committee on Agriculture, Natural, and Economic Resources, and the chairs of the House of Representatives Appropriations Committee on Agriculture and Natural and Economic Resources. 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

¹ North Carolina General Statutes Section 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, and further amended by Session Law 2017-57 to require that the annual REPS Report be submitted to the Joint Legislative Oversight Committee on Agriculture and Natural and Economic Resources, the Senate Appropriations Committee on Agriculture, Natural, and Economic Resources, and the chairs of the House of Representatives Appropriations Committee on Agriculture and Natural and Economic Resources.

On October 1, 2008, the Commission made its first annual report pursuant to N.C.G.S. § 62-133.8(j),² and last year, on September 28, 2020, the Commission made its thirteenth 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 N.C.G.S. § 62-133.8, the REPS provisions of Senate Bill 3.

2021 LEGISLATION

In 2021, the General Assembly has not passed any legislation amending the REPS.

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 2020 REPS Report, the Commission notes that it had issued numerous orders interpreting various provisions of the REPS statute, 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

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; the Joint Legislative Oversight Committee on Agriculture and Natural and Economic Resources; the Senate Appropriations Committee on Agriculture, Natural, and Economic Resources; and the chairs of the House of Representatives Appropriations Committee on Agriculture and Natural and Economic Resources Regarding Renewable Energy and Energy Efficiency Portfolio Standard, September 28, 2020 (2020 REPS Report).

comply with the REPS requirement of Senate Bill 3, but the university-owned electric suppliers, Western Carolina University and New River Light & Power Company, are not subject to the REPS requirement.

- Each electric power supplier's REPS requirement, both the set-aside requirements and the overall REPS requirements, should be based on its prior year's actual North Carolina retail sales.
- An electric public utility cannot use existing utility-owned hydroelectric generation for REPS compliance but may use power generated from new small (10 MW or less) increments of utility-owned hydroelectric generating capacity.
- The solar, swine waste and poultry waste set-aside requirements should have priority over the general REPS requirement where both cannot be met without exceeding the per-account cost cap established in N.C.G.S. § 62-133.8(h).
- The set-aside requirements may be met through the generation of power, purchase of power, or purchase of unbundled renewable energy credits (RECs).
- The 25% limitation on the use of out-of-state RECs applies to the general REPS requirement and each of the individual set-aside provisions.
- The electric power suppliers are charged with collectively meeting the aggregate swine waste and poultry waste set-aside requirements and may agree among themselves how to collectively satisfy those requirements.
- RECs associated with the electric power generated at a biomass-fueled combined heat and power (CHP) facility located in South Carolina and purchased by an electric public utility in North Carolina would be considered as in-state pursuant to N.C.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 N.C.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.

- Issuance of a joint request for proposals (RFP) is a reasonable means for the petitioners to work together collectively to meet the swine waste set-aside requirement.
- A Pro Rata Mechanism (PRM) is a reasonable and appropriate means for the State's electric power suppliers to meet the aggregate swine waste and poultry waste set-aside requirements of N.C.G.S. § 62-133.8(e) and (f). As it had earlier done with regard to the aggregate swine waste set-aside requirement, the Commission approved the joint procurement of RECs from energy produced by poultry waste, the sharing of poultry waste generation bids among electric suppliers, and other collaborative efforts as a reasonable means for the State's electric suppliers to work together to meet the poultry waste set-aside requirement.
- The term "allocations made by the Southeastern Power Administration" (SEPA), is used as a term of art in N.C.G.S. § 62-133.8(c)(2)(c). Therefore, 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 N.C.G.S. § 62-133.8(c)(2)(c).
- RECs associated with the thermal energy output of a CHP facility which uses poultry waste as a fuel should not be eligible for use to meet the poultry waste set-aside requirement under N.C.G.S. § 62-133.8(f). 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.
- 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.
- Amendments to NC-RETS Operating Procedures, Rules R8-64 through R8-69, and an application form for use by owners of renewable energy facilities in obtaining registration of a facility under Rule R8-66 should be adopted. 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.

- Commission Rules R8-67(b), R8-67(c), and R8-67(h) should be amended by adding a requirement that REPS compliance plans contain a list of planned and implemented demand-side management (DSM) measures and include a measurement and verification (M&V) plan if one is not already filed with the Commission. Additionally, the amendment added reporting requirements to the REPS compliance reports for EMCs regarding energy efficiency (EE) and implementation of M&V plans. The order also required all electric power suppliers to review the number of energy efficiency certificates (EEC) they have reported to date and submit any changes necessitated by the order.
- That Commission Rules R8-61, R8-63, and R8-64 should be amended by adding 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.
- That the electric power suppliers made a reasonable effort to comply with the swine waste and poultry waste set-aside REPS requirements in 2012 but will not be able to comply. The order concluded that it was in the public interest to eliminate the swine waste set-aside requirement in 2012, and to delay the implementation of the poultry waste set-aside requirement by one year until 2013. In addition to modifying the compliance schedules for the swine waste and poultry waste set-aside REPS requirements, the order also required that DEC and DEP file tri-annual progress reports on their compliance with, and efforts to comply with, the swine waste and poultry waste set-aside requirements.
- The electric power suppliers made a reasonable effort to comply with the swine waste and poultry waste set-aside REPS requirements in 2013 but will not be able to comply. The order concluded that it was in the public interest to delay the implementation of the swine and poultry waste set-aside requirements by one year until 2014. Finally, the order concluded that the triannual progress reporting requirement established in the Commission's 2012 Delay Order should also apply to Dominion, GreenCo, FPWC, EnergyUnited, Halifax, NCEMPA and NCMPA1.
- Proceeds from REC sales should be credited to customers if the RECs were purchased with REPS rider proceeds, or if the RECs were produced via a generating facility that was paid for by customers. Further, the Commission determined that, since it cannot anticipate every scenario, it will review REC sales on a case-by-case basis in REPS rider proceedings and general rate cases, as the issues arise. The Commission further determined that the electric

public utility would have the burden of proving that each REC sale was in the best interest of its customers and should file complete information regarding the original purchase price, resale price, the cost of replacement RECs and any incremental administrative costs or brokerage fees incurred pursuant to the transaction.

- The electric power suppliers made a reasonable effort to comply with the swine waste set-aside REPS requirement in 2014 but will not be able to comply. The Commission's determination was based on the tri-annual reports submitted by the electric power suppliers in Docket No. E-100, Sub 113A, the Petitioners' motion, and the intervenors' comments. The Commission found that, among the reasons the electric power suppliers would not be able to comply, is that the technology is in early stages of development. Additionally, the order directed the Public Staff to conduct two stakeholder meetings in 2015 to discuss potential obstacles to achieving the swine and poultry waste requirements and options for addressing them. Finally, the order concluded that the triannual progress reporting requirement established in the Commission's 2012 Delay Order and expanded in the Commission's 2013 Delay Order should continue until the Commission finds that they are no longer necessary. The order resulted in updated compliance schedules for the swine waste set-aside REPS requirement.
- On June 3, 2014, in Docket No. E-100, Sub 113, the Commission issued an Order Requesting Comments regarding potential changes to Rules R8-64 and R8-65, as well as to the reporting requirements set forth in Docket No. E-100, Subs 101, 83, and 41B (June Order). In the June Order, the Commission took note that, over the past few years, a large number of facilities, particularly solar photovoltaic, have been filing applications for CPCNs. However, it is currently unclear whether certificate holders for solar facilities are complying with this construction progress report requirement. Further, because there is no requirement for notice of completion, the Commission cannot easily discern how many facilities are actually being built. The June Order requested that interested parties file comments by June 30, 2014, and that reply comments be filed by July 21, 2014.
- It would be appropriate to streamline current reporting requirements to provide a more coherent and complete picture of the status of non-utility generators within North Carolina. The Commission's order states that a consolidated report would be beneficial to all parties. The order required DEC, DEP and Dominion to file by March 31, of each year, beginning March 31, 2015, three lists with the following information:
 - a. An Interconnection Application List of all applications in the utility's interconnection queue that provides the owner's name, Commission Docket No., AC capacity (kW), fuel type(s), application date, county, and interconnection application status;

b. An Interconnection List of all generators interconnected with the utility's system in North Carolina that provides the owner's name, Commission Docket No., AC capacity (kW), fuel type(s), power delivery date, county and whether the facility is net metering; and

c. A Purchased Power Agreement List of all facilities with which the utility has a purchased power agreement (or application) that provides the owner's name, Commission Docket No., AC capacity (kW), fuel type(s), energized date, tariff name(s), term (years), county and PPA application status. Concurrently, the Order repealed the reporting requirement contained in Commission Rule R8-64(e).

- On December 1, 2015, the Commission issued an Order Modifying the Swine and Poultry Waste Set-Aside Requirements and Providing Other Relief. The order concluded that the electric suppliers made a reasonable effort to comply with the swine and poultry waste set-aside REPS requirements in 2015 but would not be able to comply. As to the swine waste set-aside requirement, the Commission notes that despite allowing electric power suppliers to bank RECs for three years, the cumulative effect of this banking has yet to result in the ability to comply with the initial swine waste set-aside. Therefore, the Commission concluded that it is in the public interest to delay the entire requirement of N.C.G.S. § 62-133.8(e) for one year and allow electric power suppliers to continue to bank RECs for swine waste set-aside requirement compliance in future years. As to the poultry waste set-aside requirement, the Commission notes that compliance has been hindered by the fact that the technology of power production from poultry waste continues to be in its early stages of development. No party presented evidence that the aggregate 2015 poultry waste set-aside could be met, however, the Public Staff, DEC, and DEP state that, due to the availability of RECs pursuant to Section 4 of S.L. 2010-195, as amended by S.L. 2011-279 (Senate Bill 886), the 2014 level of the poultry waste set-aside could be maintained. Therefore, the Commission concluded that the poultry waste set-aside requirement should be modified by adding an additional year (2015) of compliance at the 170,000 MWh threshold, prior to escalating the requirement to 700,000 MWh.
- On December 15, 2015, the Commission issued an Order Establishing 2015 Poultry Waste Set-Aside Requirement Allocation. The Commission recognized that the pendency of the matter regarding the allocation of the aggregate poultry waste set-aside requirement for 2015 created uncertainty for electric power suppliers. Therefore, the Commission found good cause to clarify the allocation of the aggregate poultry waste set-aside requirement for compliance year 2015. The order established that the 2014 retail sales data reported to NC-RETS by electric power suppliers and utility compliance aggregators, shall be used to allocate, on a pro-rata basis, the 170,000 MWh aggregate poultry waste set-aside requirement for 2015.

- On April 18, 2016, in Docket No. E-100, Sub 113, the Commission issued an Order Establishing Method of Allocating the Aggregate Poultry Waste Resource Set-Aside Requirement concluding that, starting with the 2016 compliance year, the aggregate poultry waste set-aside obligation shall be allocated among the electric power suppliers by averaging three years of historic retail sales (2013, 2014, and 2015), with the resulting allocation held constant for three years (2016, 2017, and 2018).
- On June 6, 2016, in Docket No. E-100, Sub 113, the Commission issued an order on NCSEA's Request, concluding that a topping cycle combined heat and power system does not constitute an energy efficiency measure under N.C.G.S. § 62-133.8(a)(4), except to the extent that the secondary component, the waste heat component, is used. NCSEA appealed the Commission's decision to the North Carolina Court of Appeals, which reversed the Commission decision finding that the statute (N.C.G.S. § 62-133.8) is unambiguous and that it allows the entire CHP system to be considered an energy efficiency measure. *See, State ex. rel. Util' Comm. v. North Carolina Sustainable Energy Association*, No. COA16-1067, (2017).
- On August 5, 2016, in Docket No. E-100, Sub 113, the Commission Issued an Order Establishing the 2016, 2017, and 2018 Poultry Waste Set-Aside Requirement Allocation. The order established that the aggregate poultry waste set-aside requirement for 2016, 2017, and 2018 shall be allocated among the electric power suppliers and utility compliance aggregators based on the load ratio share calculations filed by the NC-RETS administrator in Docket No. E-100, Sub 113 on July 11, 2016 and the methodology previously adopted by the Commission. The resulting requirements will be held constant for three years, and the allocation process will be repeated in 2018 in order to set the allocation requirements for compliance years 2019, 2020, and 2021.
- On October 17, 2016, the Commission issued an Order Modifying the Swine and Poultry Waste Set-Aside Requirements and Providing Other Relief. The order concluded that the electric suppliers made a reasonable effort to comply with the swine and poultry waste set-aside REPS requirements in 2016 but would not be able to comply. As to the swine waste set-aside requirement, the Commission notes that despite allowing electric power suppliers to bank RECs for three years, the cumulative effect of this banking has yet to result in the ability to comply with the initial swine waste set-aside. Therefore, the Commission concluded that it is in the public interest to delay the entire requirement of N.C.G.S. § 62-133.8(e) for one year and allow electric power suppliers to continue to bank RECs for swine waste set-aside requirement compliance in future years. As to the poultry waste set-aside requirement, the Commission notes that compliance has been hindered by the fact that the technology of power production from poultry waste continues to be in its early stages of development. No party presented evidence that the aggregate 2016 poultry waste set-aside could be met, however, the Public Staff, DEC, and DEP

state that, due to the availability of RECs pursuant to Section 4 of S.L. 2010-195, as amended by S.L. 2011-279 (Senate Bill 886), the 2015 level of 170,000 MWh for the poultry waste set-aside could be maintained. Therefore, the Commission concluded that the poultry waste set-aside requirement should be modified by adding an additional year (2016) of compliance at the 170,000 MWh threshold, prior to escalating the requirement to 700,000 MWh.

- On August 3, 2017, the Commission issued an order in Docket No. E-100, Subs 113, 121, and 134, giving notice of the Commission's implementation of new fees and administrative changes as a result of the enactment of House Bill 589 (S.L. 2017-192). In that order, the Commission expressed its intent to undertake additional administrative implementation of the provisions of S.L. 2017-192, including adopting amendments to the Commission's rules, as necessary, and updating and adopting various forms available on the Commission's website. Finally, that order noted the Commission's intent to initiate separate proceedings to implement other sections of S.L. 2017-192.
- The Commission has adopted the following Commission Rules: Rule R8-71, Competitive Procurement of Renewable Energy (Docket No. E-100, Sub 150); Rule R8-72, Community Solar Program (Docket No. E-100, Sub 155); and Rule R8-73, Applications for Certificate of Authority to Engage in Business as an Electric Generator Lessor; Transfers; and Notice (Docket No. E-100, Sub 156).
- On October 16, 2017, the Commission issued an Order Modifying the Swine and Poultry Waste Set-Aside Requirements and Providing Other Relief. The order concluded that the electric suppliers made a reasonable effort to comply with the swine and poultry waste set-aside REPS requirements in 2017 but would not be able to comply. As to the swine waste set-aside requirement, the Commission noted that despite allowing electric power suppliers to bank RECs for four years, the cumulative effect of this banking has yet to result in the ability to comply with the initial swine waste set-aside. Therefore, the Commission concluded that it is in the public interest to delay the entire requirement of N.C.G.S. § 62-133.8(e) for one year and allow electric power suppliers to continue to bank RECs for swine waste set-aside requirement compliance in future years. As to the poultry waste set-aside requirement, the Commission noted that compliance has been hindered by the fact that the technology of power production from poultry waste continues to be in its early stages of development. No party presented evidence that the aggregate 2017 poultry waste set-aside could be met, however, the Public Staff, DEC, and DEP state that, due to the availability of RECs pursuant to Section 4 of S.L. 2010-195, as amended by S.L. 2011-279 (Senate Bill 886), the 2016 level of 170,000 MWh for the poultry waste set-aside could be maintained. Therefore, the Commission concluded that the poultry waste set-aside requirement should be modified by

adding an additional year (2017) of compliance at the 170,000 MWh threshold, prior to escalating the requirement to 700,000 MWh.

- In its order dated March 29, 2018, the Commission found good cause to adopt various administrative, technical, and conforming amendments to the Commission's rules to continue implementation of S.L. 2017-192. The Commission further found good cause to adopt revised forms including the following: (1) Application for a Certificate of Public Convenience and Necessity- Rule R8-64; (2) Report of Proposed Construction – Rule R8-65; (3) Registration Statement for the Registration of a Renewable Energy Facility or New Renewable Energy Facility– Rule R8-66; and (4) Annual Certification of Compliance with the Requirements of Commission Rule R8-66 for the Continuation of the Registration of a Renewable Energy Facility or New Renewable Energy Facility. Finally, the Commission gave notice that, effective May 1, 2018, the Commission would require the use of these forms by persons seeking a certificate of public convenience and necessity pursuant to Commission Rule R8-64, reporting the proposed construction of an electric generating facility pursuant to N.C.G.S. § 62-110.1(g), seeking registration of a renewable energy facility pursuant to Commission Rule R8-66, or annually certifying compliance with the requirements of Commission Rule R8-66.
- On October 8, 2018, the Commission issued an Order Modifying the Swine and Poultry Waste Set-Aside Requirements and Providing Other Relief. The order concluded that the electric suppliers made a reasonable effort to meet the swine and poultry waste set-aside REPS requirements in 2018 but would not be able to comply. As to the swine waste set-aside requirement, the Commission noted that DEC, DEP, and Dominion are in a position to meet a modified swine waste set-aside requirement of 0.02% of the prior year's retail sales even though the other electric power suppliers in the state are not in a similar position. The Commission also concluded that it is in the public interest to delay entirely the 2018 swine waste set-aside requirements for one additional year, for the remaining electric power suppliers and to delay future increases in the swine waste set-aside requirement. The Commission allowed electric power suppliers that have acquired swine waste RECs for 2018 REPS compliance to bank such RECs for swine waste set-aside compliance in future years. As to the poultry waste set-aside requirement, the Commission noted that compliance has been hindered by the fact that the technology of power production from poultry waste continues to be in its early stages of development and projects have experienced operational challenges. No party presented evidence that the aggregate 2018 poultry waste set-aside of 700,000 MWh could be met; however, the parties agree that a modified compliance requirement of 300,000 MWh for 2018, 700,000 MWh for 2019, and 900,000 MWh for 2020 is achievable. Therefore, the Commission concluded that the poultry waste set-aside requirement should be modified accordingly.

- On December 16, 2019, as corrected on February 13, 2020, the Commission issued an Order Modifying the Swine and Poultry Waste Set-Aside Requirements and Providing Other Relief. The order concluded that the electric suppliers made a reasonable effort to meet the swine and poultry waste set-aside REPS requirements in 2019 but would not be able to fully comply. As to the swine waste set-aside requirement, the Commission noted that DEC, DEP, and Dominion were in a position to meet a modified swine waste set-aside requirement of 0.04% of the prior year's retail sales even though the other electric power suppliers in the state were not in a similar position. The Commission also concluded that for the remaining electric power suppliers, it was in the public interest to delay entirely the 2018 swine waste set-aside requirements for one additional year and to delay future increases in the swine waste set-aside requirement. The Commission allowed electric power suppliers that had acquired swine waste RECs for 2019 REPS compliance to bank such RECs for swine waste set-aside compliance in future years. As to the poultry waste set-aside requirement, the Commission noted that compliance had been hindered by the fact that the technology of power production from poultry waste continued to be in its early stages of development and projects had experienced operational challenges. No party presented evidence that the aggregate 2019 poultry waste set-aside of 700,000 MWh could be met; however, the parties agreed that modified compliance requirements of 500,000 MWh for 2019, 700,000 MWh for 2020, and 900,000 MWh for 2021 would be achievable. Therefore, the Commission concluded that the poultry waste set-aside requirements should be modified accordingly.

Since the 2020 REPS Report was submitted, the Commission has issued a limited number of additional orders interpreting various provisions of the REPS statute and seeking additional information to aid the Commission in future interpretations. The following orders are of particular interest:

Order Modifying the Swine Waste Set-Aside Requirements and Providing Other Relief, Docket No. E-100, Sub 113 (December 30, 2020)

On September 25, 2020, NCEMC, FPWC, EnergyUnited, TVA, the Town of Waynesville, the Town of Windsor, NCEMPA and NCMAPA1 (Joint Movants) filed a motion to modify and delay the 2020 swine waste set-aside requirements of N.C.G.S. § 62-133.8(e). Joint Movants requested that the Commission modify the obligation of EMCs and Munis to comply with the swine waste set-aside requirement by (1) delaying their need to comply with the requirements by one year until 2021; (2) allowing them to bank any swine waste-derived renewable energy certificates (RECs) previously or subsequently acquired for use in future compliance years; and (3) allowing them to replace compliance with the swine waste set-aside requirement in 2020 with other compliance measures in accordance with N.C.G.S. § 62-133.8(b), (c), and (d). The Joint Movants stated

that they had individually and collectively made reasonable efforts to comply with the REPS components for swine waste.

On December 30, 2020, the Commission issued an Order Modifying the Swine Waste Set-Aside Requirements and Providing Other Relief. The order concluded that the EMCs and Munis made a reasonable effort to meet the swine waste set-aside REPS requirement for 2020 but would not be able to comply. Compliance with the swine waste set-aside requirements had been hindered by the fact that the technology of power production from swine waste continued to face challenges and that swine waste-to-energy projects continued to experience operational difficulties. The Commission concluded that it is in the public interest to delay entirely the 2020 swine waste set-aside requirements for one additional year for the EMCs and Munis. The Commission allowed the EMCs and Munis that had acquired swine waste RECs for 2020 REPS compliance to bank such RECs for swine waste set-aside compliance in future years and allowed the EMCs and Munis to replace compliance with the swine waste set-aside requirement in 2020 with other compliance measures in accordance with N.C.G.S. § 62-133.8(b), (c), and (d). The Commission required the EMCs and Munis, or their utility compliance aggregator, to file with the Commission a one-time compliance plan detailing the efforts and actions they intend to take to comply with the swine waste set-aside requirements for 2021 and future years. The Commission cautioned the EMCs and Munis that they are mandated to use reasonable efforts, which include consideration of novel technologies and different approaches, to comply with the swine waste set-aside requirement for compliance in 2021.

The order resulted in the following updated compliance schedules for the swine waste set-aside REPS requirements for EMCs and Municipalities:

Calendar Year	Requirement for Swine Waste Resources
2020	0.00%
2021	0.07%
2022-2024	0.14%
2025 and thereafter	0.20%

Order Granting Waiver Request and Approving Prior Period Adjustment, Docket No. E-2, Sub 1106 (May 11, 2021, Errata Order issued May 13, 2021)

On May 11, 2021, the Commission issued an order granting Duke Energy Carolinas, LLC (DEC) and Duke Energy Progress, LLC (DEP), (jointly Duke) a waiver of NC-RETS' one-year limit on prior period adjustments and allowing Duke to update their 2017-2020 RECs accounts to remove RECs previously and incorrectly associated with net-metering non-time-of-use customers and retire an equivalent quantity of RECs from its surplus of general RECs in its accounts to cover the shortfall.

Order Accepting REC Calculations and Accepting Multi-Fuel Methodology, Docket No. SP-2147, Sub 0 (June 11, 2021)

On June 11, 2021, following a lengthy audit by the Public Staff, the Commission issued an order accepting Storm Hogs Power Partners, LLC's updated REC multi-fuel calculations and allowing it to amend its swine waste RECs, poultry waste RECs, and general biomass waste RECs earned from August 2017 through September 2019. As a result of the order, Duke, as purchaser of the RECs, was required to reclassify 1515 swine RECs as general biomass RECs in its NC-RETS account.

Renewable Energy Facilities

The REPS statute 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 N.C.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 N.C.G.S. § 62-110.1(a), no person, including any electric power supplier, may begin construction of an electric generating facility in North Carolina without first obtaining from the Commission a certificate of public convenience and necessity (CPCN). Two exemptions from this certification requirement are provided in N.C.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 31, 2021, the Commission has accepted registration statements filed by 1440 facilities.

As detailed in the 2020 REPS Report, the Commission has issued several 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 N.C.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 N.C.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 N.C.G.S. § 62-110(a) or under N.C.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, measurable thermal or mechanical energy at a retail electric customer’s facility pursuant to N.C.G.S. § 62-133.8(a)(1); and is not eligible for RECs. However, the thermal energy that is used to heat the chicken houses is eligible to earn RECs.
- Issued a declaratory ruling that: (1) biosolids, the organic material remaining after treatment of domestic sewage and combusted at the applicant’s wastewater treatment plant, are a “renewable energy resource” as defined by N.C.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 N.C.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 N.C.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 N.C.G.S. § 62-133.8(a)(8). The Commission reasoned that the General Assembly, by including several specific examples of biomass in the statute, did not intend to limit the scope of the term to those examples. Rather, the term “biomass” encompasses a broad category of resources and should not be limited absent express intent to do so. The Environmental Defense Fund and NCSEA appealed the Commission’s order to the North Carolina Court of Appeals. On August 2, 2011, the Court of Appeals issued a decision affirming the Commission’s order.
- Issued an order declaring that yard waste and the percentage of RDF used as fuel are renewable energy resources, and that the percentage of Syngas produced from yard waste and RDF used as fuel is a renewable energy resource. The Commission held that yard waste is an organic material having a constantly replenished supply, and, thus, is a renewable resource under N.C.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, the Commission also concluded that steam that bypasses the turbine generators and waste heat being used to pre-heat the feedwater for the boilers will not be used to directly produce electricity or useful, measurable thermal or mechanical energy at a retail electric customer’s facility pursuant to N.C.G.S. § 62-133.8(a)(1), and, therefore, will not be eligible to earn RECs.
- Accepted registration of residential solar thermal water heating facilities on over one thousand homes which were allowed to install meters on a representative sample of the homes, rather than on each home, to determine the number of British Thermal Units (BTUs) of thermal energy that will be produced and on which RECs will be earned, and assigned to the unmetered homes the thermal heat measures recorded on the metered homes.
- Issued an order accepting the registrations of nine solar thermal facilities, but found that a request for a waiver of the requirement in N.C.G.S. § 62-133.8(d)

that solar thermal energy be measured by a meter in order to produce RECs eligible to meet the solar set-aside requirement was inappropriate, disallowing the use of RETScreen Analysis Software (RETScreen) to calculate the estimated solar thermal production of each facility. The Commission notes 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.

- Denied the registration of a thermal system as a new renewable energy facility based upon the fact that the system would be integrated into an existing biomass facility and the thermal energy would be used to pre-heat the feed water entering the biomass-fueled boiler resulting in the use of less biomass fuel. The Commission concluded that it was appropriate to view the facility as one entity eligible to earn RECs on the electrical output of the biomass-fueled boiler, rather than two separate entities capable of earning RECs.
- Granted CPCNs with conditions and accepted registrations as new renewable energy facilities for a 300-MW wind facility in Pasquotank and Perquimans Counties and an 80-MW wind facility in Beaufort County.
- Issued an order declaring that directed biogas is a renewable energy resource. The Commission's order states 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's order further notes 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 notes 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 N.C.G.S. § 62-133.8(b)(2)(e).
- Issued an order stating that the policy that only net output is eligible for the issuance of RECs was not based solely on the definition of "station service" in the Commission rules, but that N.C.G.S. § 62.133.8(a)(6) requires that RECs be derived from "electricity or equivalent energy" that is "supplied by a renewable energy facility." The Commission held that gross electricity used to power the facility itself cannot be considered electricity "supplied by a renewable energy facility." The Commission interpreted "station service" to encompass all electric demand consumed at the generation facility that would not exist but for the generation itself, including, but not limited to, lighting, office equipment, heating, and air-conditioning at the facility.

- Issued an order finding that, because compensation could be built into alternative financial arrangements to recover the costs of electric generation, a scenario in which an electricity producer sold steam and gave away electricity must be considered “[p]roducing, generating, transmitting, delivering, or furnishing electricity ... to or for the public for compensation” under N.C.G.S. § 62-3(23)a.1. The Commission notes that were it to rule otherwise it would create multiple scenarios in which an electric generator could provide electrical services “free of charge” to a third party and build in compensation to recover its costs via other arrangements, thus, avoiding the statutory definition of a public utility in N.C.G.S. § 62-3(23)a.1.
- Issued an Order on Request for Declaratory Ruling addressing the eligible output, pursuant to S.L. 2010-195 (Senate Bill 886), to which triple credit is applied to any electric power or RECs generated by an eligible facility. The Commission held that, although the first 20 MW of biomass renewable energy facility generating capacity remained eligible for the triple credit, only the first 10 MW of biomass renewable energy facility generating capacity was eligible to earn additional credits to meet the poultry waste set-aside requirements in N.C.G.S. § 62-133.8(f). The Commission held that the limit was on the electric generating capacity, not the amount of energy or RECs that may be earned, and that RECs may be derived from both the electric generation and the waste heat used to produce electricity or useful, measurable thermal or mechanical energy at a retail electric customer's facility.
- Issued an order accepting amended registrations of a 1.9-MW_{AC} directed biogas-fueled combined heat and power (CHP) facility and a 1.6-MW_{AC} biomass fueled CHP facility that would generate electricity through the pyrolysis of wood (the first of this type registered in the State). Both facilities were certified by the Secretary of State as being located in a “cleanfields renewable energy demonstration parks.”
- Issued an order revoking the registrations of 63 facilities registered as renewable energy facilities or as new renewable energy facilities with the Commission. The owners of the 63 facilities listed in Appendices A and B of the order did not complete their annual certifications on or before October 15, 2014, as required by the Commission’s September 9, 2014 order, nor had an annual certification been completed for these facilities as of the date of the order. The order states that should the owner of a facility whose registration has been revoked wish to have the energy output from its facility become eligible for compliance with the REPS; the owner must again register the facility with the Commission. An Errata Order was issued reducing the number of revocations to 61 facilities.

- Issued an Order Accepting Registration of Incremental Capacity as a New Renewable Energy Facility, finding that, consistent with previous Commission orders, the incremental capacity of Weyerhaeuser NR Company's renovated CHP system, added subsequent to January 1, 2007, is a "new" renewable energy facility pursuant to N.C.G.S. § 62-133.8(a)(7). Weyerhaeuser was required to register a new project for the incremental portion in NC-RETS to facilitate the issuance of RECs, with 22.1% of the facility's electric generation and 12.2% of the facility's thermal generation reported for the new project and the remainder for the existing project.
- Issued an order revoking the registrations of 127 facilities registered with the Commission as renewable energy facilities or as new renewable energy facilities. The owners of the 127 facilities did not complete their annual certifications on or before October 1, 2015, as required by the Commission's August 12, 2015 order, nor had an annual certification been completed for these facilities as of the date of the order. The order states that should the owner of a facility whose registration has been revoked wish to have the energy output from its facility become eligible for compliance with the REPS, the owner must again register the facility with the Commission.
- Issued an Order Accepting Registration of New Renewable Energy Facilities, accepting the registration of DEC's Buck and Dan River combined-cycle facilities as new renewable energy facilities. Consistent with previous Commission orders, the Commission found that when biogas derived from anaerobic digestion of animal waste is injected into the natural gas pipeline, nominated for use by a natural gas-fueled electric generating facility, and a proper showing can be made that it is displacing or offsetting conventional natural gas, it is a renewable energy resource pursuant to N.C.G.S. § 62-133.8(a)(5). Noting that Buck and Dan River were placed into service after January 1, 2007, the Commission concluded that those facilities are "new renewable energy facilities" pursuant to N.C.G.S. § 62-133.8(a)(7). The Commission further concluded that the RECs associated with the renewable energy generated at Buck and Dan River from directed biogas will not be deemed out-of-state RECs subject to the 25% limitation on the use for REPS compliance of unbundled out-of-state RECs.
- On November 15, 2016, the Commission issued an order revoking the registrations of 112 facilities registered with the Commission as renewable energy facilities or as new renewable energy facilities. The owners of the 112 facilities did not complete their annual certifications on or before October 1, 2016, as required by the Commission's August 25, 2016 order, nor had an annual certification been completed for these facilities as of the date of the order. The order states that should the owner of a facility whose registration has been revoked wish to have the energy output from its facility become eligible for compliance with the REPS, the owner must again register the facility

with the Commission. Additional orders were issued which reduced the number of revocations to 107.

- On October 25, 2017, the Commission issued an order revoking the registrations of 59 facilities registered with the Commission as renewable energy facilities or as new renewable energy facilities. The owners of the 59 facilities did not complete their annual certifications on or before October 1, 2017, as required by the Commission's August 30, 2017 order, nor had an annual certification been completed for these facilities as of the date of the order. The order states that should the owner of a facility whose registration has been revoked wish to have the energy output from its facility become eligible for compliance with the REPS, the owner must again register the facility with the Commission.
- On June 19, 2018, in Docket No. G-9, Sub 698, the Commission issued an order approving a revised version of Piedmont Natural Gas Company, Inc.'s (Piedmont) proposed Appendix F, which sets forth the terms and conditions under which Piedmont will accept "alternative gas" into its system and deliver or redeliver it to Piedmont's customers. Alternative gas is defined, in summary, as gas capable of combustion in customer appliances or facilities which is similar in heat content and chemical characteristics to natural gas that is produced from traditional underground well sources. In proposing Appendix F, Piedmont stated that the need for establishing such terms and conditions has arisen due to the potential for sourcing supplies of methane from non-traditional suppliers, including landfills, swine waste-to-energy facilities, and poultry waste-to-energy facilities. Under the revised Appendix F approved by the Commission, and the related interconnection agreements between Piedmont and Optima KV, LLC, and between Piedmont and C2e Renewables NC, Piedmont would receive alternate gas from swine waste-to-energy projects as part of a three-year pilot program. The Commission also required detailed reporting from Piedmont related to technical and operational issues that would inform the Commission's future consideration of the issues involved. In approving the pilot program, the Commission recognized the advantages to the State of making use of alternative gas, including providing a cost effective and environmentally sound way for North Carolina swine and poultry producers to manage animal waste and providing the opportunity for electric power suppliers to comply with the swine and poultry waste set-aside requirements under the REPS. After the Commission issued its order, Piedmont and the North Carolina Pork Council sought clarification and reconsideration. On October 1, 2018, the Commission issued an Order Denying Motions for Reconsideration and Granting in Part Motion for Clarification (Reconsideration Order). That order denied the motions for reconsideration filed by NCPA and Piedmont. Further, it granted Piedmont's request to revise Appendix F: (1) to modify the timing of the filing of the semi-annual report required in Ordering Paragraph No. 9 of the Appendix F Order, and (2) to make Piedmont rather than the Alternative Gas suppliers responsible for measuring and reporting to the Commission on a

monthly basis the daily quantities, heat content, and Wobbe value of the Alternative Gas received by Piedmont. On October 30, 2018, the Commission issued an Order Accepting Compliance Filing in Part and Requiring Revisions. The order revised the Interchangeability standard in Appendix F, required modifications to Appendix F and improved notifications to the Commission when Alternative Gas Quality Standards are out of compliance with Appendix F.

- On October 30, 2018, the Commission issued an order revoking the registrations of 36 facilities registered with the Commission as renewable energy facilities or as new renewable energy facilities. The owners of the 36 facilities did not complete their annual certifications on or before October 1, 2017, as required by the Commission's August 7, 2018 order, nor had an annual certification been completed for these facilities as of the date of the order. The order states that should the owner of a facility whose registration has been revoked wish to have the energy output from its facility become eligible for compliance with the REPS, the owner must again register the facility with the Commission.
- On February 26, 2020, the Commission issued an order revoking the registrations of 48 facilities registered with the Commission as renewable energy facilities or as new renewable energy facilities. The owners of the 48 facilities did not complete their annual certifications on or before October 5, 2019, as required by the Commission's September 4, 2019 order, nor had they completed an annual certification for these facilities as of the date of the order. The order states that should the owner of a facility whose registration was revoked wish to have the energy output from its facility become eligible for compliance with the REPS, the owner must again register the facility with the Commission.

Since the 2020 REPS Report was submitted, the Commission has issued a limited number of orders interpreting provisions of the REPS Statute regarding applications for registration of renewable energy facilities, as described below.

Order Revoking Registration of Renewable Energy Facilities and New Renewable Energy Facilities, Docket No. E-100, Sub 130 (March 15, 2021).

On March 15, 2021, the Commission issued an order revoking the registrations of 21 facilities registered with the Commission as renewable energy facilities or as new renewable energy facilities. The owners of the 21 facilities did not complete their annual certifications on or before October 1, 2020, as required by the Commission's August 31, 2020. order, nor had they completed an annual certification for these facilities as of the date of the order. The order states that should the owner of a facility whose registration was revoked wish to have the energy output from its facility become eligible for compliance with the REPS, the owner must again register the facility with the Commission.

Order Giving Notice of Intent to Revoke Registration of Renewable Energy Facilities and New Renewable Energy Facilities, Docket No. E-100, Sub 130 (September 16, 2021).

On September 16, 2021, the Commission issued an order giving notice of its intent to revoke the registration of 139 renewable energy facilities and new renewable energy facilities because their owners had not completed or filed the annual certifications required each April 1, as detailed in Commission Rule R8-66(b). Facility owners were given until October 15, 2021, to file their annual certifications belatedly. Owners that do not complete the annual certifications face their facility's registrations being revoked pursuant to Commission Rule R8-66(f). The matter is pending before the Commission.

North Carolina Renewable Energy Tracking System (NC-RETS)

In its February 29, 2008 order in Docket No. E-100, Sub 113, the Commission concluded that REPS compliance would be determined by tracking RECs associated with renewable energy and energy efficiency (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 states that "[t]he Commission will begin immediately to identify an appropriate REC tracking system for North Carolina." Pursuant to N.C.G.S. § 133.8(k), enacted in 2009, the Commission was required to develop, implement, and maintain an online REC tracking system no later than July 1, 2010, in order to verify the compliance of electric power suppliers with the REPS requirements.

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

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

Funding for NC-RETS is provided directly to APX by the electric power suppliers in North Carolina that are subject to the REPS requirements of Senate Bill 3 and is recovered from the suppliers' customers through the REPS

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

At the end of 2020, each electric power supplier was required to place the RECs that it acquired to meet its 2020 REPS requirements into compliance accounts where the RECs are available for audit. The Commission will review each electric power suppliers' 2020 REPS compliance report; the associated RECs will be permanently retired. Members of the public can access the NC-RETS website 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, 2019, NC-RETS had issued 90,845,250 RECs and 41,081,722 EE certificates. These numbers could increase because renewable energy generators are allowed to enter historic production data for up to two years.
- As of September 14, 2021, 619 organizations, including electric power suppliers and owners of renewable energy facilities, had established accounts in NC-RETS.
- As of September 14, 2021, approximately 1440 renewable energy or new renewable energy facilities had been established as NC-RETS projects, enabling the issuance of RECs based on their energy production data.

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

The original MOA with APX expired on December 31, 2013. Based on feedback received from stakeholders, the Commission extended the MOA with APX through 2017, and subsequently extended the MOA through 2020. Since the 2020 REPS Report was presented, the Commission extended the MOA with APX through December 31, 2025.

Environmental Impacts

Pursuant to N.C.G.S. § 62-133.8(j), the Commission was directed to consult with the North Carolina Department of Environmental Quality (DEQ) 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 DEQ, any public comments regarding direct, secondary, and cumulative environmental impacts of the implementation of the REPS provision of Senate Bill 3. DEQ, in response to the Commission's request, notes that the REPS has provided remarkable benefits to the citizens of North Carolina.

Per DEQ, in 2020, the avoided emissions associated with REPS-certified energy efficiency (EE) and renewable energy (RE) levels were equivalent to 10%, 15%, and 24% of 2020 electricity generation sector carbon dioxide (CO₂), nitrogen dioxide (NO_x), and sulfur dioxide (SO₂) emissions, respectively, indicating that the EE measures resulting from the REPS are significantly decreasing air pollution emitted in North Carolina.

DEQ also notes stakeholder concerns regarding air and water pollution from swine operations' use of biogas technology that relies on lagoons and spray-field waste management systems. Specific concerns raised in opposition to swine waste biogas production are waterway pollution, noxious odors, and public health impacts for nearby and downstream communities, including communities with disproportionately large minority populations. Recommendations were developed for biogas that consider the concerns raised by stakeholders.⁴

An analysis was performed by Research Triangle Institute (RTI) International, in conjunction with Duke University and East Carolina University, to quantify biogas opportunities in North Carolina. A final draft report documenting this analysis was recently submitted to Duke Energy for review. The public release date for the report has not been determined at this time. During 2020 and 2021, DEQ approved the first multi-farm renewable natural gas (RNG) project in North Carolina. The project is expected to participate in the REPS program and will produce pipeline quality RNG for the Piedmont Natural Gas pipeline. To foster communication during the permitting process, DEQ also produced an Environmental Justice report associated with the project, which included an analysis of the demographics and socioeconomics of the surrounding community.⁵ DEQ's full response is attached to this report as a part of Appendix 1.

⁴ See North Carolina Clean Energy Plan, <https://deq.nc.gov/energy-climate/climate-change/nc-climate-change-interagency-council/climate-change-clean-energy--16>; North Carolina Energy Policy Council 2020 Biennial Report, Draft for Public Comment, <https://deq.nc.gov/about/divisions/energy-mineral-land-resources/energy-policy-council>; and North Carolina Climate Change Risk Assessment and Resilience Plan, <https://deq.nc.gov/energy-climate/climate-change/nc-climate-change-interagency-council/climate-change-clean-energy-17>.

⁵ See <https://www.ncleg.gov/Sessions/2021/Bills/Senate/PDF/S605v7.pdf>

ELECTRIC POWER SUPPLIER COMPLIANCE

Pursuant to Senate Bill 3, electric power suppliers are required, beginning in 2012, to meet an increasing percentage of their retail customers' energy needs by a combination of renewable energy resources and energy reductions from the implementation of EE and DSM measures. Also, pursuant to Senate Bill 3, starting in 2012, part of the REPS requirements must be met through poultry waste and swine waste (as discussed above this requirement has been amended by the Commission.) In addition, beginning in 2010 each electric power supplier was required to meet a certain percentage of its retail electric sales "by a combination of new solar electric facilities and new metered solar thermal energy facilities that use one or more of the following applications: solar hot water, solar absorption cooling, solar dehumidification, solar thermally driven refrigeration, and solar industrial process heat." N.C.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." N.C.G.S. § 62-133.8(a)(3). Described below are the REPS requirements for the various electric power suppliers and, to the extent reported to the Commission, the efforts of each toward REPS compliance.

Monitoring of Compliance with REPS Requirement

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

Compliance Plan

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

Compliance Report

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

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

For each electric public utility, the Commission will consider the REPS compliance report and determine the extent of compliance with the REPS requirement at the same time as it considers cost recovery pursuant to the REPS incremental cost rider authorized in N.C.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

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

<u>Customer Class</u>	<u>2008-2011</u>	<u>2012-2014</u>	<u>2015 and thereafter</u>
Residential per account	\$10.00	\$12.00	\$27.00
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 N.C.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 N.C.G.S. § 62-130(e), any overcollection under the REPS rider shall be refunded to a utility's customers with interest through operation of the REPS EMF rider.

Electric Public Utilities

There are three electric public utilities operating in North Carolina subject to the jurisdiction of the Commission: DEP, DEC, and Dominion. Although DEC and DEP underwent a merger in 2012, for REPS compliance purposes they continue to operate as two distinct entities.

REPS Requirement

North Carolina General Statutes Section 62-133.8(b) provides that each electric public utility in the State (DEC, DEP, and Dominion) shall be subject to a REPS requirement according to the following schedule:

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

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

- Generate electric power at a new renewable energy facility.
- Use a renewable energy resource to generate electric power at a generating facility other than the generation of electric power from waste heat derived from the combustion of fossil fuel.
- Reduce energy consumption through the implementation of an 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.⁶

Duke Energy Progress, LLC (DEP)

Compliance Report

On June 09, 2020, in Docket No. E-2, Sub 1251, DEP filed its 2019 REPS compliance report and application for approval of its 2020 REPS cost recovery rider pursuant to N.C.G.S. § 62-133.8 and Commission Rule R8-67. By its application and testimony, DEP proposed to implement the following total REPS rates effective for service rendered on and after December 1, 2020: \$1.29 per month for residential customers; \$6.98 per month for general service and lighting customers; and \$47.88 per month for industrial customers. DEP’s proposed rates are below the annual per-account limits established pursuant to N.C.G.S. § 62-133.8(h)(4). DEP’s proposed new REPS rates, if approved, would result in decreases in monthly REPS charges, including regulatory fee, as follows: \$(0.16) for residential customers; \$(1.27) for general service and lighting customers; and a decrease including regulatory fee of \$(11.70) for industrial customers. In its 2019 REPS compliance report, DEP indicates that it acquired sufficient RECs to meet the 2019 requirement of 10% of its 2018 retail sales. Additionally, DEP indicates that it acquired sufficient solar RECs to meet the 2019 requirement of 0.20% of its

⁶ Section 1 of S.L. 2011-55 amended N.C.G.S. § 62-133.8(a) by adding a definition of “electricity demand reduction,” and Section 2 amended N.C.G.S. § 62-133.8(b)(2) by adding a new subsection (g) making electricity demand reduction a REPS resource, effective April 28, 2011.

2018 retail sales. Pursuant to the Commission's December 16, 2019 order, as corrected on February 13, 2020, in Docket No. E-100, Sub 113, the 2019 swine waste set-aside requirement for electric public utilities was modified to 0.04% of 2018 retail sales and the 2019 aggregate poultry waste set-aside requirement for all electric power suppliers was modified to 500,000MWh for 2019. DEP indicates that it met the modified swine waste set aside and poultry waste set-aside requirements. On September 4, 2020, DEP and the Public Staff filed a motion requesting that the Commission excuse all expert witnesses from testifying at the September 15, 2020 expert witness hearing and accept the expert witnesses' testimony and exhibits into the record. On September 11, 2020, the Commission issued an order granting the motion and canceling the expert witness hearing. On November 30, 2020, the Commission issued an order allowing DEP's proposed REPS rider charges to become effective December 1, 2020. In addition, the Commission found that DEP complied with the 2019 REPS requirements. Therefore, the Commission approved DEP's 2019 REPS compliance report and ordered that the RECs in DEP's 2019 compliance sub-account be retired.

On June 15, 2021, in Docket No. E-2, Sub 1276, DEP filed its 2020 REPS compliance report and application for approval of its 2021 REPS cost recovery rider pursuant to N.C.G.S. § 62-133.8 and Commission Rule R8-67. By its application and testimony, DEP proposed to implement the following total REPS rates effective for service rendered on and after December 1, 2021: \$1.41 per month for residential customers; \$7.40 per month for general service and lighting customers; and \$48.91 per month for industrial customers. DEP's proposed rates are below the annual per-account limits established pursuant to N.C.G.S. § 62-133.8(h)(4). DEP's proposed new REPS rates, if approved, would result in increases in monthly REPS charges, including regulatory fee, as follows: \$0.12 for residential customers; \$0.42 for general service and lighting customers; and \$1.03 for industrial customers. In its 2020 REPS compliance report, DEP indicates that it acquired sufficient RECs to meet the 2020 requirement of 10% of its 2019 retail sales. Additionally, DEP indicates that it acquired sufficient solar RECs to meet the 2020 requirement of 0.20% of its 2019 retail sales. Pursuant to the Commission's December 16, 2019 order, as corrected on February 13, 2020, in Docket No. E-100, Sub 113, the 2020 swine waste set-aside requirement for electric public utilities was modified to 0.07% of 2019 retail sales and the 2020 aggregate poultry waste set-aside requirement for all electric power suppliers was modified to 700,000MWh for 2020. DEP indicates that it met the modified swine waste set-aside and poultry waste set-aside requirements. On September 14, 2021, DEP and the Public Staff filed a motion requesting that the Commission excuse all expert witnesses from testifying at the September 21, 2021 expert witness hearing, accept the expert witnesses' testimony and exhibits into the record, and cancel the expert witness hearing. On September 15, 2021, the Commission issued an order granting the motion and canceling the expert witness hearing. DEP's 2020 REPS compliance report and application for approval of its 2021 REPS cost recovery rider are pending before the Commission.

Compliance Plan

On September 1 2020, in Docket No. E-100, Sub 165, DEP filed its 2020 REPS compliance plan as part of its 2020 Integrated Resource Plan (IRP). In its plan, DEP indicates that its overall compliance strategy to meet the REPS requirements consists of the following key components: (1) purchases of RECs; (2) purchases of renewable biogas to generate RECs; (3) constructing and operating Company-owned renewable facilities; (4) energy efficiency programs that will generate savings that can be counted towards obligation requirements; and (5) competitive procurement of renewable energy pursuant to HB 589. On June 29, 2021, the Commission issued an order waiving in part Commission Rule R8-60(h)(2) and giving notice of additional proceedings. Pursuant to this order, DEC and DEP were relieved of the obligation to file updated 2021 IRPs but were required to file their 2021 REPS Compliance Plans to include any material modifications to the short-term action plans identified in their 2020 biennial IRPs as would be required by Rule R8-60(h)(3). On August 24, 2021, the Commission scheduled a technical conference to be held on September 30, 2021 and October 1, 2021. Accordingly, DEP's 2020 IRP and REPS compliance plan are pending before the Commission.

On September 1, 2021, in Docket No. E-100, Sub 165, DEP filed its 2021 REPS compliance plan as part of its 2021 IRP Update. In its compliance plan, DEP details its REPS compliance obligation for 2021-2023, including the requirement to comply with the solar, swine waste, and poultry waste set-aside requirements. DEP calculates its solar set-aside requirement to be 72,338 RECs in 2021. It estimates its solar set-aside requirements to be 76,605 RECs in 2022 and 76,615 RECs in 2023. DEP states that it has fully satisfied and exceeded the minimum solar set-aside requirements of 0.20% during the compliance planning period through a combination of power purchase agreements and company-owned solar facilities.

DEP estimates its swine waste set-aside requirements to be 25,319 RECs in 2021, 53,623 RECs in 2022, and 53,630 RECs in 2023. DEP identifies seven primary methods for compliance with the swine waste set-aside requirement: (1) direct negotiations for additional supplies of both in-state and out-of-state resources; (2) swine-derived directed biogas from North Carolina facilities, working with Piedmont to locate favorable biogas injection sites, and directing such biogas to combined cycle plants for combustion and generation; (3) working diligently to understand the technological, permitting, and operational risks associated with various methods of producing qualifying swine waste RECs and to aid developers in overcoming those risks; when those risks cannot be overcome, the Company works with developers via contract amendments to adjust for outcomes that the developers believe are achievable based on new experience; (4) exploring modifications to current bioenergy and set-asides contracts by working with developers to add swine waste to their fuel mix; (5) utilizing the broker market for out-of-state swine RECs available in the market; (6) supporting research studies

through North Carolina State University associated with on-farm swine waste drying technology and through Research Triangle Institute associated with biogas utilization in North Carolina; and (7) collaborating with the North Carolina Pork Council to discuss project viability. DEP states that it is in a position to comply with its swine waste set-aside requirement in 2021 but its ability to comply in 2022 and 2023 may be difficult to meet as the swine waste obligation increases. Compliance is dependent on the performance of swine waste-to-energy developers under current contracts, particular achievement of projected delivery requirements, and commercial operation milestones.

DEP estimates its poultry waste set-aside requirements to be 251,548 RECs in 2021, 251,548 RECs in 2022, and 251,548 RECs in 2023. As to compliance with the poultry waste set-aside requirements, DEP states that it continues to pursue various efforts to meet its compliance requirement, including: (1) direct negotiations for additional supplies of both in-state and out-of-state resources with multiple counterparties; (2) working diligently to understand the technological, permitting, and operational risks associated with various methods of producing poultry RECS and to aid developers in overcoming those risks, using contract amendments when necessary to adjust for more realistic outcomes; (3) exploring leveraging current biomass contracts by working with developers to add poultry waste to their fuel mix; (4) exploring adding thermal capabilities to current poultry sites to bolster REC production; (5) exploring poultry-derived directed biogas at facilities in North Carolina for use at its combined cycle plants; (6) utilizing the broker market for out-of-state poultry RECs available in the market; and (7) supporting research study through the Research Triangle Institute associated with biogas utilization in North Carolina. DEP states it is a position to comply with its poultry waste set-aside requirement for 2021 but its ability to procure sufficient RECs to meet these requirements in 2022 and 2023 is dependent on the performance of poultry waste-to-energy developers under current contracts, particularly achievement of projected delivery requirements and commercial operational milestones.

DEP notes that ramping up to meet the increased compliance targets has been problematic because suppliers have either delayed projects or lowered the volume of RECs to be produced. In addition, one facility that was previously generating poultry RECs for DEP is currently offline for repairs and modifications and is not expected to be generating RECs again until 2023. The Company is, nevertheless, encouraged by the growing use of thermal poultry RECs and the proposals that it has recently received from developers.

DEP states that its general REPS requirement, net of the set-asides discussed above, is estimated to be 4,521,086 RECs in 2021, 4,787,762 RECs in 2022, and 4,788,384 RECs in 2023. DEP notes several resource options available to the Company to meet its general requirement, including, maximum use of allowable EE savings (40%), hydroelectric power procured from suppliers, the Solar Rebate Program, the CPRE Program, and a variety of biomass, wind, and

solar resources. DEP states that it plans to meet a significant portion of the General Requirement with RECs from solar facilities as solar energy has emerged as the predominant renewable energy resource in the Southeast. Acceptance of DEP's 2021 REPS compliance plan is pending before the Commission.

Duke Energy Carolinas, LLC (DEC)

Compliance Report

On February 23, 2021, in Docket No. E-7, Sub 1246, DEC filed its 2020 REPS compliance report and an application for approval of REPS rider charges to be effective September 1, 2021. By its application and testimony, DEC requested monthly REPS rates, not including regulatory fee, of \$1.10 for residential customers; \$5.01 for general service and lighting customers; and \$(6.03) for industrial customers-each of which is below the incremental per-account cost cap established in N.C.G.S. § 62-133.8(h). DEC's proposed new monthly REPS rates, if approved, would result in the following increases to DEC's current monthly REPS rates, including regulatory fee of \$0.32 for residential customers and \$1.17 for general service and lighting customers and would result in a decrease of \$(2.17) for industrial customers. In its 2020 REPS compliance report, DEC indicates that it acquired sufficient RECs to meet the 2020 requirement of 10% of its 2019 retail sales. Additionally, DEC indicates that it acquired sufficient solar RECs to meet the 2020 requirement of 0.20% of its 2019 retail sales. Pursuant to the Commission's December 16, 2019 order, as corrected on February 13, 2020, in Docket No. E-100, Sub 113, the 2020 swine waste set-aside requirement for electric public utilities was modified to 0.07% of 2019 retail sales and the 2020 aggregate poultry waste set-aside requirement for all electric power suppliers was modified to 700,000MWh for 2020. DEC indicates that it met the modified swine waste set aside and poultry waste set-aside requirements. On May 24, 2021, DEC and the Public Staff filed a joint motion requesting that certain expert witnesses be excused from appearing at the June 1, 2021, hearing and that the prefiled testimony, exhibits, and affidavits of the respective witnesses be received into evidence and made part of the record. On May 27, 2021, the Commission granted the movants motion. On June 1, 2021, DEC and the Public Staff filed a joint motion requesting that the remaining expert witnesses be excused from appearing at the hearing and that their prefiled testimony, exhibits and affidavits be received into evidence and made part of the record. On June 1, 2021, the Commission issued an order granting the motion and canceling the hearing. On August 17, 2021, the Commission issued an order allowing DEC's proposed REPS rider charges to become effective September 1, 2021. In addition, the Commission found that DEC complied with the 2020 REPS requirements. Therefore, the Commission approved DEC's 2020 REPS compliance report and ordered that the RECs in DEC's 2020 compliance sub-account be retired.

Compliance Plan

On September 1, 2020, in Docket No. E-100, Sub 165, DEC filed its 2020 REPS compliance plan as part of its 2020 Integrated Resource Plan (IRP). In its plan, DEC indicates that its overall compliance strategy to meet the REPS requirements consists of the following key components: (1) purchases of RECs; (2) purchases of renewable biogas to generate RECs; (3) constructing and operating Company-owned renewable facilities; (4) energy efficiency programs that will generate savings that can be counted towards obligation requirements; and (5) competitive procurement of renewable energy pursuant to HB 589. On June 29, 2021, the Commission issued an order waiving in part Commission Rule R8-60(h)(2) and giving notice of additional proceedings. Pursuant to this order, DEC and DEP were relieved of the obligation to file updated 2021 IRPs but were required to file their 2021 REPS Compliance Plans to include any material modifications to the short-term action plans identified in their 2020 biennial IRPs as would be required by Rule R8-60(h)(3). On August 24, 2021, the Commission scheduled a technical conference to be held on September 30, 2021 and October 1, 2021. Accordingly, DEC's 2020 IRP and REPS compliance plan are pending before the Commission.

On September 1, 2021, in Docket No. E-100, Sub 165, DEC filed its 2021 REPS compliance plan. In its compliance plan, DEC details its REPS compliance obligation for 2021-2023, including the requirement to comply with the solar, swine waste set-aside, and poultry waste set-aside requirements. DEC calculates its solar set-aside requirement to be 116,073 RECs in 2021. It estimates its solar set-aside requirements to be 120,889 RECs in 2022 and 122,253 RECs in 2023. DEC states that it has fully satisfied and exceeded the minimum solar set-aside requirements of 0.20% during the compliance planning period through a combination of power purchase agreements and company-owned facilities.

DEC estimates its swine waste set-aside requirements to be 40,628 RECs in 2021, 84,623 RECs in 2022, and 85,579 RECs in 2023. DEC identifies seven primary methods for compliance with the swine waste set-aside requirement: (1) direct negotiations for additional supplies of both in-state and out-of-state resources; (2) continuing pursuit of swine-derived directed biogas from North Carolina facilities, working with Piedmont to locate favorable biogas injection sites, and directing such biogas to combined cycle plants for combustion and generation; (3) working diligently to understand the technological, permitting, and operational risks associated with various methods of producing qualifying swine waste RECs and to aid developers in overcoming those risks; when those risks cannot be overcome, the Company works with developers via contract amendments to adjust for outcomes that the developers believe are achievable based on new experience; (4) exploring modifications to current bioenergy and set-asides contracts by working with developers to add swine waste to their fuel mix; (5) utilizing the broker market for out-of-state swine RECs available in the market; (6) supporting research studies through North Carolina State University associated with on-farm

swine waste drying technology and through Research Triangle Institute associated with biogas utilization in North Carolina; and (7) collaborating with the North Carolina Pork Council to evaluate various swine waste project viability. DEC states that it is in a position to comply with its swine waste set-aside requirements in 2021, but its ability to comply in 2022 and 2023 is dependent on the performance of swine waste-to-energy developers under current contracts, particularly achievement of projected delivery requirements and commercial operation milestones.

DEC estimates its poultry waste set-aside requirements to be 406,068 RECs in 2021, 406,068 RECs in 2022, and 406,068 in 2023. As to compliance with the poultry waste set-aside requirements, DEC states that it continues to pursue various efforts to meet its compliance requirement, including: (1) direct negotiations for additional supplies of both in-state and out-of-state resources with multiple counterparties; (2) gaining an understanding of the technological, permitting, and operational risks associated with various methods to produce qualifying RECs; (3) exploring leveraging current biomass contracts by working with developers to add poultry waste to their fuel mix; (4) exploring adding thermal capabilities to current poultry sites to bolster REC production; (5) exploring poultry-derived directed biogas at facilities in North Carolina for use at its combined cycle plants; (6) utilizing its REC trader to search for out-of-state poultry RECs available in the market; and (7) supporting a research study through Research Triangle Institute associated with biogas utilization in North Carolina. DEC states that it is in a position to meet its poultry waste set-aside requirements in 2021, but its ability to procure sufficient RECs to meet its pro-rata share of the increased requirements in 2022 and 2023 is dependent on the performance of poultry waste-to-energy developers under current contracts, particularly achievement of projected delivery requirements and commercial operation milestones.

DEC notes that one new poultry waste-to-energy project is expected to come online in 2022 and three others are expected to come online in 2023. DEC's ability to comply in 2022 and 2023 is dependent on facilities producing at their contracted levels, and historical experience indicates that facilities usually experience some start-up issues and take time to reach full expected production levels. Ramping up to meet the increased compliance targets has been problematic because suppliers have either delayed projects or lowered the volume of RECs to be produced. In addition, one facility that was previously generating poultry RECs for DEC is currently offline for repairs and modifications and is not expected to be generating RECs again until 2023. The Company is, nevertheless, encouraged by the growing use of thermal poultry RECs and the proposals that it has recently received from developers. The Company remains actively engaged in seeking additional resources and continues to make every reasonable effort to comply with the Poultry Waste Set-Aside requirements

DEC states that its general REPS requirement, net of the set-asides discussed above, is estimated to be 7,191,323 RECs in 2021; 7,492,550 RECs in 2022 and 7,577,663 RECs in 2023. DEC notes several resource options available

to the Company to meet its general requirement, including, maximum use of allowable EE savings (40%), hydroelectric power procured from suppliers, the Solar Rebate Program, the CPRE Program, and a variety of biomass, wind, and solar resources. DEC states that it plans to meet a significant portion of the General Requirement with RECs from solar facilities as solar energy has emerged as the predominant renewable energy resource in the Southeast. Acceptance of DEC's 2021 REPS compliance plan is pending before the Commission.

Dominion North Carolina Power (Dominion)

Compliance Report

On August 11, 2020, in Docket No. E-22, Sub 588, Dominion filed its application for approval of its proposed 2020 REPS cost recovery rider charges and its 2020 REPS compliance report (for the 2019 compliance year). Dominion's REPS compliance report included the compliance status for the Town of Windsor (Windsor) and was submitted with direct testimony and exhibits in support of Dominion's application for REPS cost recovery. By its application and testimony, Dominion proposes to implement the following total REPS rates, including regulatory fee, effective for service rendered on and after February 1, 2020: a \$0.25 charge per month for residential customers; a \$1.40 charge per month for commercial customers; and a \$9.36 charge per month for industrial customers. In addition, Dominion's REPS compliance report indicates that it achieved REPS compliance for itself and Windsor. On November 10, 2020, Dominion and the Public Staff filed a joint motion to excuse the witnesses for Dominion and the Public Staff from appearing at the expert witness hearing scheduled for November 17, 2020, and accept the prefiled testimony, exhibits, and affidavits into evidence and make them part of the record. On November 13, 2020, the Commission issued an order granting the motion and canceling the expert witness hearing. On January 21, 2021, the Commission issued an order approving Dominion's REPS riders, Dominion's 2020 REPS compliance report, and retiring the RECS in Dominion and Windsor's 2019 compliance sub-accounts.

On August 10, 2021, in Docket No. E-22, Sub 603, Dominion filed an application for approval of its 2021 REPS cost recovery rider and its 2021 REPS compliance report (for the 2020 compliance year). Dominion's REPS compliance report included the compliance status for Windsor. By its application and testimony, Dominion requested approval of the following REPS rider charges, including regulatory fee, effective for service rendered on and after February 1, 2022: a \$0.25 charge per month for residential customers; a \$1.37 charge per month for commercial customers; and a \$9.12 charge per month for industrial customers. If approved, the proposed rates would result in a decrease for commercial customers of \$(0.03) and industrial customers of \$(0.24). Dominion's 2021 REPS compliance report states that Dominion met its 2020 general REPS requirements (427,657 RECs) by purchasing eligible wind and biomass RECs and EECs and that Dominion met Windsor's requirements (4,333

RECs) by purchasing general obligation RECS and retiring 252 SEPA hydro RECs. Dominion's REPS compliance report further states that Dominion met its 2020 solar set-aside requirement (8,562 RECs) and the Town of Windsor's requirements (96 RECs) by purchasing solar RECs. Pursuant to the Commission's December 16, 2019 order, as corrected on February 13, 2020, in Docket No. E-100, Sub 113, the 2020 swine waste set-aside requirement for electric public utilities was modified to 0.07% of 2019 retail sales and the 2020 aggregate poultry waste set-aside requirement for all electric power suppliers was modified to 700,000MWh. Dominion indicates that it met its modified swine waste set-aside requirement (2,997 RECs) for 2020. Dominion also stated it met its poultry waste set-aside requirement (22,311 RECs) and Windsor's poultry waste set-aside requirement (254 RECs) for 2020. Approval of Dominion's REPS rider, Dominion's 2020 REPS compliance report, and retiring the RECS in Dominion and Windsor's 2019 compliance sub-accounts are pending before the Commission.

Compliance Plan

On May 1, 2020, in Docket No. E-100, Sub 165, Dominion filed its 2020 REPS compliance plan as part of its 2020 IRP. Dominion states that, during the 2020-2022 planning period, it plans to meet its general REPS requirements using RECs, EE savings, and new company-generated renewable energy where economically feasible. Dominion continues to be responsible for meeting the REPS requirements for Windsor. Dominion projects that it will meet the solar set-aside requirements for itself through 2022 as it has executed contracts for the sale of solar RECs sufficient to meet these requirements. Dominion further states that it has executed contracts with solar facilities located in North Carolina sufficient to meet Windsor's in-state compliance requirements for 2020 through 2022. Dominion states that it will continue to make all reasonable efforts to satisfy these requirements during the 2020-2022 planning period. As a result of Dominion's efforts to locate operational swine digesters in the continental United States, Dominion has sufficient RECs in NC-RETS to meet both Dominion and Windsor's swine waste set-aside requirements during the 2020-2022 planning period. In addition, Dominion states that, due to the high default rate with swine waste to energy contracts, Dominion intends to contract for RECs above and beyond the initial requirement to increase the probability of achieving and maintaining compliance and to bank any excess RECs for future compliance years. Dominion states that both Dominion and Windsor have sufficient poultry RECs in NC-RETS to meet the 2020-2022 requirements. Dominion has also continued to search for opportunities to purchase poultry waste RECs in North Carolina and throughout the continental United States and intends to contract for RECs above and beyond the initial requirement to increase the probability of maintaining compliance. On June 29, 2021, the Commission issued an order waiving in part Commission Rule R8-60(h)(2) and giving notice of additional proceedings in the IRP docket. Pursuant to this order, DEC and DEP were relieved of the obligation to file updated 2021 IRPs but Dominion was required to continue to comply with all requirements for filing an updated 2021 IRP. On August 24, 2021, the Commission scheduled a

technical conference to be held on September 30 and October 1, 2021. Accordingly, Dominion's 2020 IRP and REPS compliance plan are pending before the Commission.

On September 1, 2021, Dominion filed its 2021 REPS compliance plan as part of its 2021 IRP Update. Dominion states that, during the 2021-2023 planning period, it plans to meet its general REPS requirements using RECs, EE savings, and new company-generated renewable energy where economically appropriate. Dominion continues to be responsible for meeting the REPS requirements for Windsor. Dominion projects that it will meet the solar set-aside requirements for itself through 2023 as it has executed contracts for the sale of solar RECs sufficient to meet these requirements. Dominion further states that it has executed contracts with solar facilities located in North Carolina sufficient to meet Windsor's in-state compliance requirements for 2021 through 2023. Dominion states that it will continue to make all reasonable efforts to satisfy these requirements during the 2021-2023 planning period. As a result of Dominion's efforts to locate operational swine digesters in the continental United States, Dominion has sufficient RECs in NC-RETS to meet both Dominion and Windsor's swine waste set-aside requirements during the 2021-2023 planning period. In addition, Dominion states that, due to the high default rate with swine waste to energy contracts, Dominion intends to contract for RECs above and beyond the initial requirement to increase the probability of achieving and maintaining compliance and to bank any excess RECs for future compliance years. Dominion states that both Dominion and Windsor have sufficient poultry RECs in NC-RETS to meet the 2021-2023 requirements. Dominion has also continued to search for opportunities to purchase poultry waste RECs in North Carolina and throughout the continental United States and intends to contract for RECs above and beyond the initial requirement to increase the probability of maintaining compliance. This matter is still pending before the Commission.

EMCs and Municipally Owned Electric Utilities

There are thirty-one EMCs serving customers in North Carolina, including twenty-six that are headquartered in the state. Twenty-five of the EMCs are members of North Carolina EMC (NCEMC), a generation and transmission (G&T) services cooperative that provides wholesale power and other services to its members. NCEMC also serves as a utility compliance aggregator for 23 of its members⁷; the Town of Oak City, a wholesale customer of Edgecombe - Martin EMC; the Town of Fountain, a wholesale customer of Pitt & Green EMC; the Town

⁷ On December 18, 2017, the Commission issued an order authorizing NCEMC to serve as utility compliance aggregator on behalf of NCEMC's REPS Compliance Customers and to assume the REPS compliance services and related functions currently being performed by GreenCo effective January 1, 2018.

of Enfield, a wholesale customer of Halifax EMC⁸; Mecklenburg EC, headquartered in Chase, Virginia; and Broad River EC, headquartered in Gaffney, South Carolina. Tennessee Valley Authority (TVA) serves as utility compliance aggregator for four wholesale customers serving retail customers in North Carolina: Blue Ridge Mountain EMC; Mountain Electric Coop, Inc.; Tri-State EMC; and Murphy Electric Power Board⁹. DEC serves as utility compliance aggregator for wholesale customers: Blue Ridge EMC; Rutherford EMC; and the Towns of Dallas, Forest City, and Highlands.¹⁰ Carolina Power Partners, LLC¹¹, (CPP) serves as the utility compliance aggregator for the Towns of Winterville, Stantonsburg, Sharpsburg, Lucama, and Black Creek, as well as the Cities of Concord and Kings Mountain (CPP Municipalities). EnergyUnited files its own REPS compliance plans and REPS compliance reports.

In addition, there are seventy-two 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 or utility compliance aggregator. Fifty-one of the North Carolina municipalities are participants in either NCEMPA or NCMPA1, municipal power agencies that provide wholesale power to and serve as utility compliance aggregators for their members¹². FPWC and the Town of Waynesville file their own REPS compliance plans and reports. Six university-related members are not subject to the REPS reporting requirements and the remaining municipal members are referenced elsewhere in this section.

On October 18, 2019, the Commission granted NTE Carolina's, LLC, n/k/a Carolina Power Partners, LLC, request to serve as a utility compliance aggregator on behalf of the Towns of Winterville, Stantonsburg, Sharpsburg, Lucama, and Black Creek, as well as the Cities of Concord and Kings Mountain.

⁸ On December 17, 2018, the Commission issued an order authorizing NCEMC to serve as utility compliance aggregator on behalf of Halifax and Enfield beginning in its 2018 REPS compliance report and 2019 REPS compliance plan and for future years.

⁹ On September 7, 2010, the Commission 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.

¹⁰ DEC's contracts to provide REPS compliance services for the Cities of Concord and Kings Mountain ended in December 2018.

¹¹ On May 22, 2020, NTE Carolina's, LLC, informed the Commission of its name change from NTE Carolinas, LLC, to Carolina Power Partners, LLC.

¹² By orders issued August 27, 2008, the Commission allowed the fifty-one municipal members of the power agencies to file through NCEMPA and NCMPA1.

REPS Requirement

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

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

- Generate electric power at a new renewable energy facility.
- Reduce energy consumption through the implementation of 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 (SEPA).
- Purchase RECs derived from in-state or out-of-state renewable energy facilities. An electric power supplier subject to the requirements of this subsection may use certificates derived from out-of-state renewable energy facilities to meet no more than 25% of the requirements of this section.
- Acquire all or part of its electric power through a wholesale purchase power agreement with a wholesale supplier of electric power whose portfolio of supply and demand options meet the requirements of this section.
- Use electric power that is supplied by a new renewable energy facility or saved due to the implementation of DSM or EE measures that exceeds the requirements of this section for any calendar year as a credit towards the requirements of this section in the following calendar year or sell the associated RECs.
- Reduce energy consumption through "electricity demand reduction," which is a voluntary reduction in the demand of a retail customer

achieved by two-way communications devices that are under the real time control of the customer and electric power supplier.¹³

Electric Membership Corporations

North Carolina Electric Membership Corporation (NCEMC)

By orders issued in Docket No. E-100, Sub 118, the Commission authorized NCEMC to serve as utility compliance aggregator on behalf of 25 EMCs.¹⁴ Those orders also authorized NCEMC to serve as utility compliance aggregator on behalf of Mecklenburg Electrical Cooperative, Broad River Electrical Cooperative, Oak City, and the Town of Fountain, which is a wholesale customer of Pitt & Greene EMC. As detailed in the Commissions prior reports, the role of utility compliance aggregator was previously provided by GreenCo Solutions Inc.

On August 31, 2020, in Docket No. E-100, Sub 168, NCEMC filed its 2019 REPS compliance report and 2020 REPS compliance plan. In its plan, NCEMC states 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 approved EE programs to meet its members' REPS requirements. NCEMC states that the electric power suppliers expect to meet the modified poultry waste set-aside requirements for 2020, but due to counterparty facility construction delays and reduced output levels, it does not appear likely that NCEMC's current contract will enable it to meet the requirement in 2021 and 2022. NCEMC also states that the electric power suppliers do not expect to meet the swine waste set-aside requirements in 2020. Further, based on the current activities and indications of development activity in the state, there is uncertainty around the likelihood that the swine waste set-aside requirements will be met in 2021 and beyond. NCEMC, together with select electric suppliers, will request a delay to the 2020 swine waste set-aside REPS requirements due to a lack of sufficient swine waste resources. In addition, NCEMC states that it will monitor the progress of the development of such resources and continue to make reasonable efforts to comply with the swine and poultry waste set-aside requirements. In its 2019 REPS compliance report, NCEMC states that it retired a total of 1,395,495 RECs to meet the REPS compliance requirements of its REPS compliance members and those of Mecklenburg and Broad River EMCs, which included 304,159 solar RECs to meet the solar set-aside requirements and 49,670 poultry waste RECs to meet the poultry waste set-aside requirements. NCEMC notes that its swine waste set-aside

¹³ Section 1 of S.L. 2011-55 amended N.C.G.S. § 62-133.8(a) by adding a definition of "electricity demand reduction," and Section 2 amended N.C.G.S. § 62-133.8(c)(2) by adding a new subsection (g) making electricity demand reduction a REPS resource, effective April 28, 2011.

¹⁴ NCEMC's REPS Compliance Members include Albemarle EMC, Brunswick EMC, Cape Hatteras EMC, Carteret-Craven EMC, Central EMC, Edgecombe-Martin EMC, Four County EMC, French Broad EMC, Haywood EMC, Jones-Onslow EMC, Lumbree 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.

requirements were delayed pursuant to the Commission's order issued on December 16, 2019, in Docket No. E-100, Sub 113 (2019 Delay Order). In addition, NCEMC detailed the RECs associated with EE programs, totaling 271,820 RECs, that are attributed to EE and DSM programs. On August 17, 2021, the Commission issued an order approving NCEMC's 2019 REPS compliance report, accepting NCEMC's 2020 REPS compliance plan, and authorizing retirement of 2019 RECs held in NCEMC's sub-accounts.

On August 30, 2021, in Docket No. E-100, Sub 174, NCEMC filed its 2020 REPS compliance report and 2021 REPS compliance plan. In its plan, NCEMC states 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 approved EE programs to meet its members' REPS requirements. NCEMC states that the electric power suppliers are not expected to meet the swine waste set-aside requirement for 2021-2023 and will be requesting a modification to the 2021 swine waste set-aside REPS requirements due to a lack of sufficient swine resources. NCEMC states that it does not expect to meet the poultry waste set-aside requirement for 2021 and while it entered into sufficient contracts to meet its long-term requirements for poultry waste set-aside requirements, it does not appear likely that some of the counterparties to these contracts will be able to produce the full contract quantity to enable NCEMC to meet the poultry requirements for 2022 and 2023. In its 2020 REPS compliance report, NCEMC states that it retired a total of 1,365,430 RECs to meet the REPS compliance requirements of its REPS compliance members and those of Mecklenburg and Broad River EMCs, which included 230,225 solar RECs to meet the solar set-aside requirements and 69,537 poultry waste RECs to meet the poultry waste set-aside requirements. NCEMC notes that its swine waste set-aside requirements were delayed pursuant to the Commission's order issued on December 30, 2020, in Docket No. E-100, Sub 113 (2020 Delay Order) In addition, NCEMC detailed the RECs associated with EE programs, totaling 286,636 RECs, that are attributed to EE and DSM programs. Approval of NCEMC's 2020 REPS compliance report, acceptance of NCEMC's 2021 REPS compliance plan, and authorization to retire of 2020 RECs held in NCEMC's sub-accounts are pending before the Commission at this time.

EnergyUnited Electric Membership Corporation (EnergyUnited)

On August 26, 2020, in Docket No. E-100, Sub 168, EnergyUnited filed its 2019 REPS compliance report and 2020 REPS compliance plan. In its report, EnergyUnited states that it met its 2019 general REPS requirement (272,329 RECs), its solar set-aside requirements (5,447 RECs), and its poultry waste set-aside requirement (9,693 RECs). EnergyUnited's swine waste set-aside requirement was deferred until 2020. EnergyUnited has developed two approved Energy Efficiency Programs and continues to purchase RECs and consider development of PPAs in order to promote new renewable generation. In its plan, EnergyUnited states it intends to comply with its future REPS obligations through

its SEPA allocations, approved EE programs, and the purchase of RECs and renewable energy, including the purchase of renewable energy from Iredell Transmission, LLC (a landfill gas-powered generation facility). EnergyUnited states that it has participated with a group of NC electric power suppliers, as approved by the Commission, to jointly procure and engage in collaborative efforts to obtain renewable energy or renewable energy certificates to satisfy the swine and poultry waste set-aside requirements. EnergyUnited has contracted for the purchase of a significant number of out-of-state swine RECs that could be used to meet a portion of its future swine waste set-aside requirements for several years, but despite these efforts, EnergyUnited does not anticipate meeting its portion of the swine waste set-aside requirement for 2020 and will again be seeking a deferral from the Commission. EnergyUnited, with the collaborative group, has also entered into several different poultry REC agreements with various suppliers, although those projects continue to strive to achieve desired outputs. EnergyUnited also contracted with an additional poultry RECs supplier to begin in 2023 which should provide for more security in compliance with its poultry RECs requirement in the coming years. EnergyUnited indicated its anticipated annual REPS riders for compliance years 2020-2022 as \$3.60 for residential customers, \$18.36 for commercial customers, and \$184.44 for industrial customers. EnergyUnited states that it does not anticipate an increase in its rider during the next several years. On August 17, 2021, the Commission issued an order approving EnergyUnited's 2019 REPS compliance report, accepting EnergyUnited's 2020 REPS compliance plan, and authorizing retirement of 2019 RECs held in EnergyUnited's sub-accounts.

On August 28, 2021, in Docket No. E-100, Sub 174, EnergyUnited filed its 2020 REPS compliance report) and 2021 REPS compliance plan. In its report, EnergyUnited states that it met its 2020 general REPS requirement (268,578 RECs), its solar set-aside requirements (5,372 RECs), and its poultry waste set-aside requirement (13,570 RECs). EnergyUnited's swine waste set-aside requirement was deferred until 20210. EnergyUnited has developed two approved Energy Efficiency Programs and continues to purchase RECs and consider development of PPAs in order to promote new renewable generation. In its plan, EnergyUnited states it intends to comply with its future REPS obligations through its SEPA allocations, approved EE programs, and the purchase of RECs and renewable energy, including the purchase of renewable energy from Iredell Transmission, LLC (a landfill gas-powered generation facility). EnergyUnited states that it has participated with a group of NC electric power suppliers, as approved by the Commission, to jointly procure and engage in collaborative efforts to obtain renewable energy or renewable energy certificates to satisfy the swine and poultry waste set-aside requirements. EnergyUnited has contracted for the purchase of a significant number of out-of-state swine RECs that could be used to meet a portion of its future swine waste set-aside requirements for several years, but despite these efforts, EnergyUnited does not anticipate meeting its portion of the swine waste set-aside requirement for 2021 and will again be seeking a deferral from the Commission. EnergyUnited, with the collaborative group, has

also entered into several different poultry REC agreements with various suppliers, although those projects continue to strive to achieve desired outputs. EnergyUnited contracted with an additional poultry RECs supplier, but to date, the counterparty has not generated any swine energy credits and there is no certainty in that producer's ability to produce swine RECs in the future. In October 2020, the major supplier of in-state poultry RECs to EnergyUnited suspended production of poultry-fueled energy at its thermal and energy production facilities. Accordingly, the number of RECs contracted for will fall well-short of its mandate for 2021 and EnergyUnited likely will be seeking a deferral of the poultry waste REPS requirement as well. EnergyUnited entered into additional contracts with a producer anticipated to begin production in 2023. Once performance of this contract is underway, EnergyUnited anticipates being able to achieve compliance from that year forward. EnergyUnited indicated its anticipated annual REPS riders for compliance years 2021-2023 as \$9.00 for residential customers, \$45.96 for commercial customers, and \$461.16 for industrial customers. EnergyUnited's proposed REPS rates, if approved, would result in increases in monthly REPS charges of \$5.40 for residential customers, \$27.60 for commercial customers and \$276.72 for industrial customers. EnergyUnited states that it does not anticipate an increase in its rider during the foreseeable future. Approval of EnergyUnited's 2020 REPS compliance report, acceptance of EnergyUnited's 2021 REPS compliance plan, and retirement of 2020 RECs held in EnergyUnited's sub-accounts are pending before the Commission.

Tennessee Valley Authority (TVA)

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

On August 31, 2020, TVA, acting as utility compliance aggregator on behalf of Blue Ridge Mountain EMC, Mountain Electric Cooperative, Tri-State EMC, and Murphy Electric Power Board, filed its 2020 REPS compliance plan and 2019 REPS compliance report. In its plan, TVA indicates its intent to fulfill the general REPS requirement in 2020 through 2022 with its SEPA allocations, purchase of out-of-state wind RECs, and the purchases of various in-state RECs. With regard to its cooperatives' solar set-aside requirement in years 2020 through 2021, TVA stated that it plans to use its TVA Generation Partners solar site for meeting 100% of the cooperatives' solar set-aside requirements. TVA states that it has acquired a source for poultry RECs that will supply sufficient RECs for TVA to meet the current 2020 poultry waste set-aside requirement. TVA indicates that despite making reasonable efforts to procure swine RECs through multiple requests for offers, a lack of response indicates that there are insufficient swine waste resources available for TVA to meet the current 2020 swine waste set-aside requirement. Accordingly, TVA will be joining with other electric suppliers in filing

a request to delay the swine waste set-aside requirement for an additional year. In its report, TVA states it has satisfied its cooperatives' 2019 general REPS requirement (78,171 RECs) with its SEPA allocations, purchase of out-of-state wind RECs, and the purchases of various in-state RECs and had satisfied its cooperatives' 2019 solar set-aside requirement (23,032 RECs) through the generation of solar energy. TVA notes that it was relieved of its 2019 swine waste set-aside requirements and had fulfilled its 2019 poultry waste set-aside requirement. On August 17, 2021, the Commission issued an order approving TVA's 2019 REPS compliance report, accepting TVA's 2020 REPS compliance plan, and authorizing retirement of 2019 RECs held in TVA's sub-accounts.

On August 31, 2021, TVA, acting as utility compliance aggregator on behalf of Blue Ridge Mountain EMC, Mountain Electric Cooperative, Tri-State EMC, and Murphy Electric Power Board, filed its 2021 REPS compliance plan and 2020 REPS compliance report. In its plan, TVA indicates its intent to fulfill the general REPS requirement in 2021 through 2023 with its SEPA allocations, purchase of out-of-state wind RECs, and the purchases of various in-state RECs. With regard to its cooperatives' solar set-aside requirement in years 2021 through 2023, TVA stated that it plans to use its TVA Generation Partners solar site for meeting 100% of the cooperatives' solar set-aside requirements. TVA states that it has acquired a source for poultry RECs that will supply sufficient RECs for TVA to meet the current 2021 poultry waste set-aside requirement. TVA indicates that despite making reasonable efforts to procure swine RECs through multiple requests for offers, a lack of response indicates that there are insufficient swine waste resources available for TVA to meet the current 2021 swine waste set-aside requirement. Accordingly, TVA will be joining with other electric suppliers in filing a request to delay the swine waste set-aside requirement for an additional year. In its report, TVA states it has satisfied its cooperatives' 2021 general REPS requirement (78,879 RECs) with its SEPA allocations, purchase of out-of-state wind RECs, and the purchases of various in-state RECs and had satisfied its cooperatives' 2021 solar set-aside requirement (1,578 RECs) through the generation of solar energy. TVA notes that it was relieved of its 2021 swine waste set-aside requirements and had fulfilled its 2021 poultry waste set-aside requirement (4,417 MWh). Approval of TVA's 2020 REPS compliance report, acceptance of TVA's 2021 REPS compliance plan, and authorization to retire 2020 RECs held in TVA's sub-accounts are pending with the Commission.

Municipally Owned Electric Utilities

North Carolina Eastern Municipal Power Agency (NCEMPA)

On August 31, 2020, in Docket No. E-100, Sub 168, NCEMPA filed on behalf of its members, its 2020 REPS compliance plan and 2019 REPS compliance report. In its REPS compliance plan, NCEMPA states that its members have no plans to generate electric power at a renewable energy facility but will continue to meet their REPS requirements by purchasing RECs and through its

members SEPA allocations. NCEMPA further states that it continues to implement EE programs, but it no longer uses EE as a method of REPS compliance, citing the costs of M&V, and the low number of RECs actually produced. NCEMPA states that it has entered into contracts to purchase various types of RECs, including contracts for enough RECs to satisfy the solar set-aside requirement through 2022, and its pro rata share of the statewide aggregate of the poultry waste set-aside requirement through 2022. With regard to the swine waste set-aside requirements, NCEMPA states that it contracted for swine waste RECs and has taken delivery of a portion of these RECs; however, counterparty delays and operational failures continue to place NCEMPA in a position where it will be unable to meet its 2019 swine waste set-aside requirements. NCEMPA notes that the Commission's 2019 Delay Order delayed the swine waste set-aside requirements for 2019 for one year. In its REPS compliance report, NCEMPA states that it met its 2019 general REPS requirement (734,035 RECs) through the purchase of bundled renewable energy from hydro generation sources and the purchase of solar, biomass, and poultry RECs. Additionally, NCEMPA states in its report that it met its 2019 solar set-aside requirement (15,380 RECs) by purchasing solar RECs and its 2019 poultry waste set-aside requirement (27,156 RECs) by purchasing poultry RECs and RECs available under S.L. 2011-279 (Senate Bill 886). NCEMPA shows in its REPS compliance report that its 2019 actual incremental compliance costs were well below the per-account cost cap. On August 17, 2021, the Commission approved NCEMPA's 2019 REPS compliance report, accepted NCEMPA's 2020 REPS compliance plan, and authorized retirement of 2019 RECs held in NCEMPA's sub-accounts.

On August 31, 2021, in Docket No. E-100, Sub 174, NCEMPA filed on behalf of its members, its 2021 REPS compliance plan and 2020 REPS compliance report. In its REPS compliance plan, NCEMPA states that its members have no plans to generate electric power at a renewable energy facility but will continue to meet their REPS requirements by purchasing RECs and through its members SEPA allocations. NCEMPA further states that it continues to implement EE programs, but it no longer uses EE as a method of REPS compliance, citing the costs of M&V, and the low number of RECs actually produced. NCEMPA states that it has entered contracts to purchase various types of RECs, including contracts for sufficient RECs to satisfy the solar set-aside requirement through 2023, and its pro rata share of the statewide aggregate of the poultry waste set-aside requirement through 2023. With regard to the swine waste set-aside requirements, NCEMPA states that it contracted for swine waste RECs and has taken delivery of a portion of these RECs; however, counterparty delays and operational failures continue to place NCEMPA in a position where it will be unable to meet its 2020 swine waste set-aside requirements. NCEMPA notes that the Commission's 2020 Delay Order delayed the swine waste set-aside requirements for 2020 for one year. In its REPS compliance report, NCEMPA states that it met its 2020 general REPS requirement (670,233 RECs) through the purchase of bundled renewable energy from hydro generation sources and the purchase of solar, biomass, and poultry RECs. Additionally, NCEMPA states in its report that it

met its 2020 solar set-aside requirement (14,455 RECs) by purchasing solar RECs and its 2020 poultry waste set-aside requirement (38,017 RECs) by purchasing poultry RECs and RECs available under S.L. 2011-279 (Senate Bill 886). NCEMPA shows in its REPS compliance report that its 2020 actual incremental compliance costs were well below the per-account cost cap. Approval of NCEMPA's 2020 REPS compliance report, acceptance of NCEMPA's 2021 compliance plan, and authorization to retire 2020 RECs held in NCEMPA's sub-accounts are pending before the Commission at this time.

North Carolina Municipal Power Agency No. 1 (NCMPA1)

On August 31, 2020, in Docket No. E-100, Sub 168, NCMPA1 filed its 2020 REPS compliance plan and 2019 REPS compliance report, on behalf of its member municipalities. In its plan, NCMPA1 states that it intends to meet its members' REPS requirements by investigating and developing new renewable energy facilities, purchasing RECs, and utilizing SEPA allocations. NCMPA1 states that it will continue to implement its current EE programs, but it no longer uses EE as a method of REPS compliance, citing the costs of M&V, the low number of RECs actually produced, and the availability of other REPS compliance methods. NCMPA1 states that it had entered into contracts to purchase various types of RECs and will continue to investigate the market for unbundled RECs as a cost-effective means of REPS compliance. In its REPS compliance plan, NCMPA1 states that it had entered into contracts for enough RECs to satisfy the solar set-aside requirements through 2022, and contracts for enough RECs to satisfy the poultry waste set-aside requirements through 2022. With regard to the swine waste set-aside requirements, NCMPA1 states that continued delays among counterparties, terminated REC agreements with counterparties, and material delays and terminations in the operation of swine waste to energy projects has resulted in NCMPA1 projecting that it will not be able to meet its swine waste set-aside requirements in 2019 or beyond. NCMPA1 notes the 2019 Delay Order delayed its requirement to meet swine waste set-asides for another year. In its REPS compliance report, NCMPA1 states that it met its 2019 general REPS requirement (517,705 RECs) by purchasing renewable energy from solar generation resources, purchase of bundled renewable energy from hydro generation resources, and through the purchase of solar, biomass, hydro, and poultry RECs. Additionally, NCMPA1 states that it met its 2019 solar set-aside requirement (10,355 RECs) by purchasing electricity from solar generating facilities and through the purchase of solar RECs and met its 2019 poultry set-aside requirement (19,101 RECs) through the purchase of RECs. NCMPA1 states that its 2019 incremental costs were below the annual limit on incremental costs for REPS compliance. On August 17, 2021, the Commission approved NCMPA1's 2019 REPS compliance report, accepted NCMPA1's 2020 REPS compliance plan, and authorized retirement of 2019 RECs held in NCMPA1's sub-accounts.

On August 31, 2021, in Docket No. E-100, Sub 174, NCMPA1 filed its 2021 REPS compliance plan and 2020 REPS compliance report, on behalf of its

member municipalities. In its plan, NCMPA1 states that it intends to meet its members' REPS requirements by investigating and developing new renewable energy facilities, purchasing RECs, and utilizing SEPA allocations. NCMPA1 states that it will continue to implement its current EE programs, but it no longer uses EE as a method of REPS compliance, citing the costs of M&V, the low number of RECs actually produced, and the availability of other REPS compliance methods. NCMPA1 states that it had entered into contracts to purchase various types of RECs and will continue to investigate the market for unbundled RECs as a cost-effective means of REPS compliance. In its REPS compliance plan, NCMPA1 states that it had entered into contracts for enough RECs to satisfy the solar set-aside requirements through 2023. With regard to the swine waste set-aside requirements, NCMPA1 states that continued delays among counterparties, terminated REC agreements with counterparties, and material delays and terminations in the operation of swine waste to energy projects has resulted in NCMPA1 projecting that it will not be able to meet its swine waste set-aside requirements in 2021 or beyond. NCMPA1 notes the 2020 Delay Order delayed its requirement to meet swine waste set-asides for another year. While NCMPA1 had contracted for out-of-state poultry RECs which was to provide for sufficient poultry RECs to reach its 25% out-of-state limit on poultry RECs for 2021-2023, the counterparty has now filed for bankruptcy and as a result, future delivery of out-of-state poultry RECs is no longer assured. In its REPS compliance report, NCMPA1 states that it met its 2020 general REPS requirement (476,511 RECs) by purchasing renewable energy from solar generation resources, purchasing bundled renewable energy from hydro generation resources, and purchasing solar, biomass, hydro, and poultry RECs. Additionally, NCMPA1 states that it met its 2020 solar set-aside requirement (10,271 RECs) by purchasing electricity from solar generating facilities and by purchasing solar RECs and that it met its 2020 poultry set-aside requirement (26,740 RECs) through the purchase of RECs. NCMPA1 states that its 2020 incremental costs were below the annual limit on incremental costs for REPS compliance. Approval of NCMPA1's 2020 REPS compliance report, acceptance of NCMPA1's 2021 compliance plan, and authorization to retire 2020 RECs held in NCMPA1's sub-accounts are pending before the Commission at this time.

Fayetteville Public Works Commission (FPWC)

On August 31, 2020, in Docket No. E-100, Sub 168, FPWC filed its 2020 REPS compliance plan and 2019 REPS compliance report. In its REPS compliance plan, FPWC states that it intends to meet its REPS requirements by earning solar RECs through the generation of electric power attributable to its community solar program, as well as utilizing its SEPA allocations, implementing a Voltage Reduction Strategy, which is currently in the pilot stage, and purchasing RECs. Further, FPWC notes that it continues to seek and consider all reasonable opportunities to engage in efforts to achieve compliance with the swine and poultry waste set-aside requirements. FPWC intends to move, possibly jointly with other electric power suppliers who are obligated to purchase poultry waste and swine

waste set-aside RECs to further modify and delay their poultry and swine waste REPS requirement for one additional year. Finally, FPWC states that its incremental costs for REPS compliance are projected to be less than its per-account cost cap in 2019 through 2021. In its REPS compliance report, FPWC states that it is required to meet a 2019 general REPS requirement of 208,263 RECs, solar set-aside requirements of 4,166 solar RECs and poultry waste set-aside requirements of 7,564 poultry RECs. FPWC notes that pursuant to the Commission's 2019 Delay Order, it is not required to meet a swine waste set-aside REC requirement for 2019. On August 17, 2021, the Commission issued an order approving FPWC's 2019 REPS compliance report, accepting FPWC's 2020 REPS compliance plan, and authorizing retirement of 2019 RECs held in FPWC's sub-account.

On August 31, 2021, in Docket No. E-100, Sub 174, FPWC filed its 2021 REPS compliance plan and 2020 REPS compliance report. In its REPS compliance plan, FPWC states that it intends to meet its REPS requirements by earning solar RECs through the generation of electric power attributable to its community solar program, as well as utilizing its SEPA allocations, implementing a Voltage Reduction Strategy, which is currently in the pilot stage, and purchasing RECs. Further, FPWC notes that it continues to seek and consider all reasonable opportunities to engage in efforts to achieve compliance with the swine and poultry waste set-aside requirements. FPWC intends to move, possibly jointly with other electric power suppliers who are obligated to purchase poultry waste and swine waste set-aside RECs, to further modify and delay its poultry and swine waste REPS requirement for 2021 for one additional year. Finally, FPWC states that its incremental costs for REPS compliance are projected to be less than its per-account cost cap in 2021 through 2023. In its REPS compliance report, FPWC states that it is required to meet a 2020 general REPS requirement of 199,838 RECs, solar set-aside requirements of 3,997 solar RECs and poultry waste set-aside requirements of 10,590 poultry RECs. FPWC notes that pursuant to the Commission's 2020 Delay Order, it is not required to meet a swine waste set-aside REC requirement for 2020. Approval of FPWC's 2020 REPS compliance report, acceptance of FPWC's 2021 REPS compliance plan, and authorization to retire 2020 RECs held in FPWC's sub-account are pending with the Commission.

Town of Waynesville (Waynesville)

On September 2, 2020, in Docket No. E-100, Sub 168, the Town of Waynesville (Waynesville) filed its 2019 REPS compliance report and 2020 REPS compliance plan. Waynesville stated that it met its 2019 REPS compliance requirements by retiring a total of 8,597 RECs, which included 179 solar RECs to meet the solar set-aside requirements and 330 poultry waste set-aside RECs to meet its poultry REPS requirement. Waynesville indicated that its swine waste set-aside requirements for 2019 were zero as modified by the Commission's 2019 Delay Order. In its plan, Waynesville states that it expects to fully meet the solar set-aside requirement for the 2020, 2021, and 2022. However, Waynesville does

not expect to meet either the swine waste set-aside or its poultry waste set-aside requirements for the planning period stating that due to extremely challenging conditions for a municipality of its size there is no market hub or REC clearinghouse where these RECs can be purchased on the open market. Waynesville indicates that it must approach developers that are building these projects and try to purchase a very small number of RECs which makes negotiating contracts and seeking supply agreements much more difficult. Waynesville will continue to work diligently to seek additional supply, but states that the path to compliance with both the swine and poultry waste set-aside requirements will continue to be challenging. Waynesville is reviewing appropriate measures to develop and offer its customers EE programs that will deliver savings and count toward its future REPS requirements. It also intends to use its allocations from SEPA to meet its REPS requirements. On August 17, 2021, the Commission issued an order approving Waynesville's 2019 REPS compliance report, accepting Waynesville's 2020 REPS compliance plan, and authorizing retirement of 2019 RECs held in Waynesville's sub-account.

On September 7, 2021, in Docket No. E-100, Sub 174, Waynesville filed its 2020 REPS compliance report and 2021 REPS compliance plan. Waynesville stated that it met its 2020 REPS compliance requirements by retiring a total of 8,714 RECs, which included 174 solar RECs to meet the solar set-aside requirements and 461 poultry waste set-aside RECs to meet its poultry REPS requirement. Waynesville indicated that its swine waste set-aside requirements for 2020 were zero as modified by the Commission's 2020 Delay Order. In its plan, Waynesville states that it expects to fully meet the solar set-aside requirement for the 2021, 2022, and 2023. However, Waynesville does not expect to meet either the swine waste set-aside or its poultry waste set-aside requirements for the planning period due to extremely challenging conditions for a municipality of its size. Waynesville explains there is no market hub or REC clearinghouse where these RECs can be purchased on the open market. Waynesville indicates that it must approach developers that are building these projects and try to purchase a very small number of RECs which makes negotiating contracts and seeking supply agreements much more difficult. Waynesville will continue to work diligently to seek additional supply, but states that the path to compliance with both the swine and poultry waste set-aside requirements will continue to be challenging. Waynesville is reviewing appropriate measures to develop and offer its customers EE programs that will deliver savings and count toward its future REPS requirements. It also intends to use its allocations from SEPA to meet its REPS requirements. Approval of Waynesville's 2020 REPS compliance report, acceptance of Waynesville's 2021 REPS compliance plan, and authorization to retire 2020 RECs held in Waynesville's sub-account are currently pending with the Commission.

Carolina Power Partners, LLC, f/k/a NTE Carolinas, LLC

On September 3, 2019, NTE Carolinas, LLC (NTE Carolinas) filed a motion requesting that the Commission authorize it to serve as utility compliance

aggregator on behalf of the Towns of Winterville, Stantonsburg, Sharpsburg, Lucama, and Black Creek (Towns), as well as the Cities of Concord and Kings Mountain (Cities), (jointly NTE Municipalities). On October 18, 2019, the Commission issued an order finding that based on the representation that NTE Carolinas is the full requirements wholesale electric provide for each of the NTE Municipalities, it finds good cause to authorize NTE Carolinas to serve as the utility compliance aggregator on behalf of the NTE Municipalities and to waive the obligations of each of the NTE Municipalities to annually file REPS compliance plans and REPS compliance reports pursuant to Commission Rule R8-67(b) and (c), respectively, so long as NTE Carolinas continues to serve as utility compliance aggregator on behalf of the NTE Municipalities.

On May 22, 2020, NTE Carolinas notified the Commission that it has changed its name from NTE Carolinas, LLC, to Carolina Power Partners, LLC (CPP).

On August 31, 2020, CPP filed its 2019 REPS compliance report and 2020 REPS compliance plan on behalf of its members. In its plan, CPP states that it intends to use banked in-state solar RECs, in-state swine waste RECs, poultry RECs, in-state biomass landfill methane, and in-state hydroelectric RECs to comply with its 2019-2022 compliance obligations for each of its members. CPP states that it will use SEPA allocations for the Cities of Concord and Kings Mountain within the 30% limits. In its report CPP states that it met its 2019 requirement for general RECs and did not have a swine waste set-aside REPS obligation for 2019. CPP provided information confirming that it also met its RECs obligation for solar and poultry waste set-aside for 2019. On August 17, 2021, the Commission issued an order approving CPP's 2019 REPS compliance report, accepting CPP's 2020 REPS compliance plan, and authorizing retirement of 2019 REC's in CPP's sub-accounts.

On August 31, 2021, CPP filed its 2020 REPS compliance report and 2021 REPS compliance plan on behalf of its members. In its plan, CPP states that it intends to use banked RECs, long-term purchase agreements, or purchases on the spot market to satisfy their 2021-2023 compliance obligations. Banked RECs include in-state swine waste RECs, poultry RECs, in-state biomass landfill methane RECs, and in-state hydroelectric RECs to comply with its 2021-2023 compliance obligations for each of its members. CPP states that it will use SEPA allocations for the Cities of Concord and Kings Mountain within the 30% limits. In its report CPP indicates that it met its general and solar RECs obligations, but was not able to meet its poultry waste set-aside REPS obligation for compliance year 2020. It also indicated that it does not anticipate meeting its swine and poultry waste REPS requirements for the foreseeable future if modifications are not granted by the Commission. Approval of CPP's 2020 REPS compliance report, acceptance of CPP's 2021 REPS compliance plan, and authorization to retire 2019 REC's in CPP's sub-accounts are currently pending with the Commission.

CONCLUSIONS

All the electric power suppliers have met the 2020 general REPS requirements and appear on track to meet the 2021 general REPS requirements. All the electric power suppliers have met the 2020 solar set-aside requirements and appear to be on track to meet the 2021 solar set-aside requirement. The Commission granted a joint motion to delay implementation of the 2020 swine waste set-aside requirement for one year for the EMCs and Munis. The electric public utilities met the 0.07% swine waste set-aside for 2020. Most electric power suppliers do not appear to be on track to meet the swine waste set-aside requirements for 2021 and have indicated they will request a modification in these requirements for 2021, as well as a delay in future increases in these requirements. In addition, since meeting the poultry waste set-aside requirement for the first time in 2014, the electric power suppliers have continued to meet the poultry waste set-aside requirement of 170,000 MWh each year. Electric power suppliers met an increased poultry waste set-aside requirement of 300,000 MWh in 2018, a requirement of 500,000 MWh in 2019, and a requirement of 700,000 MWh in 2020.

APPENDICES

APPENDICES

1. Environmental Review

- Letter from Chair Charlotte A. Mitchell, North Carolina Utilities Commission, to Secretary Elizabeth S. Biser, North Carolina Department of Environmental Quality (July 12, 2021)
- Letter from Assistant Secretary for Environment Sushma Masemore, North Carolina Department of Environmental Quality, to Chair Charlotte A. Mitchell, North Carolina Utilities Commission (September 1, 2021)

2. Rulemaking Proceeding to Implement Session Law 2007-397

- Order Modifying the Swine Waste Set-Aside Requirements and Providing Other Relief, Docket No. E-100, Sub 113 (December 30, 2020)
- Order Granting Waiver Request and Approving Prior Period Adjustment, Docket No. E-2, Sub 1106 (May 11, 2021, Errata Order issued May 13, 2021)
- Order Accepting REC Calculations and Accepting Multi-Fuel Methodology, Docket No. SP-2147, Sub 0 (June 11, 2021)

3. Renewable Energy Facility Registrations

- Order Revoking Registration of Renewable Energy Facilities and New Renewable Energy Facilities, Docket No. E-100, Sub 130 (March 15, 2021)
- Order Giving Notice of Intent to Revoke Registration of Renewable Energy Facilities and New Renewable Energy Facilities, Docket No. E-100, Sub 130 (September 16, 2021)

APPENDIX 1



State of North Carolina Utilities Commission

COMMISSIONERS

CHARLOTTE A. MITCHELL, CHAIR

TONOLA D. BROWN-BLAND

KIMBERLY W. DUFFLEY

LYONS GRAY

JEFFREY A. HUGHES

DANIEL G. CLODFELTER

FLOYD B. M^oKISSICK, JR.

July 12, 2021

Secretary Elizabeth S. Biser
N.C. Department of Environmental Quality
1601 Mail Service Center
Raleigh, NC 27699-1601

Dear Secretary Biser:

In August 2007, the North Carolina General Assembly 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) for this State. As part of this legislation, the General Assembly requires the Utilities 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 requirements. The Commission is further required pursuant to N.C. Gen. Stat. § 62-133.8(j) to consult with the Department of Environmental Quality 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, 2021, is appreciated so that the Commission may meet its deadline.

Please feel free to contact me if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "C. Mitchell", written over a circular stamp or watermark.

Charlotte A. Mitchell

cc: Sushma Masemore, Assistant Secretary for the Environment, DEQ
Bill Lane, General Counsel, DEQ
Mike Abraczynski, Director, Division of Air Quality

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NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

ELIZABETH S. BISER
Secretary

September 1, 2021

Ms. Charlotte A. Mitchell, Chair
North Carolina Utilities Commission
4325 Mail Service Center
Raleigh, NC 27699-4325

Re: Renewable Energy and Energy Efficiency Portfolio Standard

Dear Chairwoman Mitchell:

The following information is being provided in response to your letter dated July 12, 2021 to the Department of Environmental Quality (DEQ). It consists of an update to the September 11, 2020 report on the direct, secondary and cumulative environmental impacts, including any public comments received by DEQ on the implementation of the North Carolina Renewable Energy and Energy Efficiency Portfolio Standard (REPS), enacted under S.L. 2007-397 (Senate Bill 3).

The REPS has provided remarkable benefits to the citizens of North Carolina. In 2020, the avoided emissions associated with REPS-certified energy efficiency/renewable energy levels were equivalent to 13%, 15%, and 24%, of 2020 electricity generation sector CO₂, NO_x, and SO₂ emissions, respectively.

A. Electricity Generation Mix

Renewable energy (RE) resources including hydroelectric, biomass, biogas, solar and wind, along with energy efficiency measures, are eligible resources under the REPS.¹ Figure 1 shows North Carolina's net electric power generation from the utility and independent power producer sectors for 2007, the year the REPS became effective.² In 2007, only 2.8% of electric power was generated by renewable sources, primarily hydroelectric power. By 2020, 14% of electricity (17 million megawatt-hours (MWh)) was generated by RE with 7.3% generated by solar and 5.4% generated by hydroelectric power. The significant increase in RE generation over the past thirteen years is due to the monetary incentives and favorable regulatory environment for these sources provided by the REPS, federal and state tax credits, declining costs of RE technologies, and

¹ Solar consists of solar photovoltaic (PV) and solar thermal. Biomass includes waste wood, wood residue, black liquor solids and biosolid fuels such as poultry litter. Biogas includes landfill gas and biogas from swine operations.

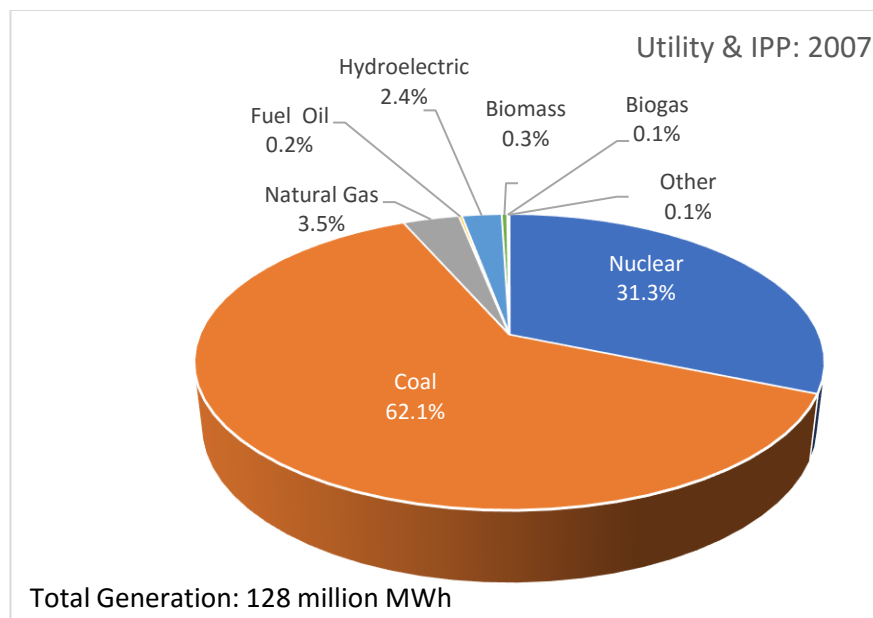
² Energy Information Administration (EIA) Form 923 Detailed Data, retrieved from <https://www.eia.gov/electricity/data/eia923/>.



favorable requirements in North Carolina under the federal Public Utility Regulatory Policies Act of 1978 (PURPA).

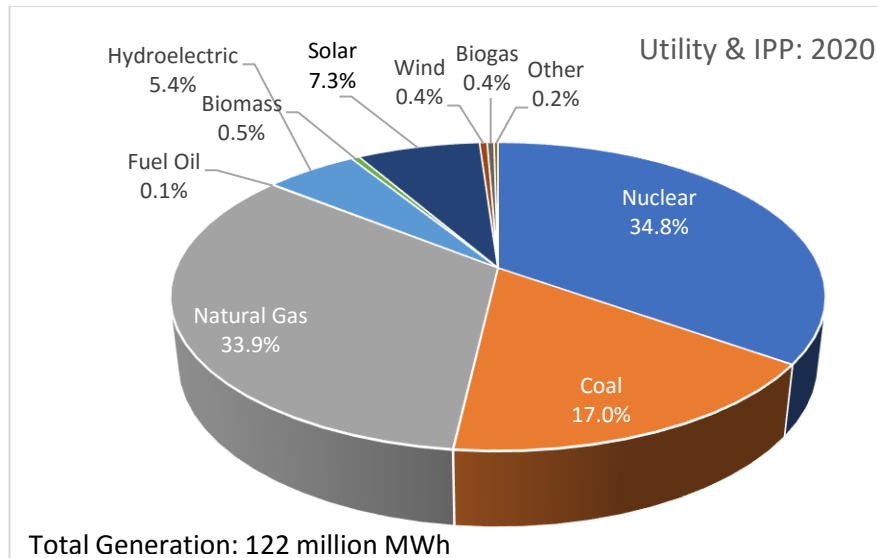
In addition to this change in renewable electricity generation, there was also a shift in the use of fossil fuels. In 2007, 62% of the electric power was generated by coal, while natural gas only accounted for 4% of the electric power generation. By 2020, natural gas generated 34% and coal only generated 17% of the electric power in North Carolina. In thirteen years, coal generation decreased from about 80 million MWh to 21 million MWh, while natural gas generation increased from about 5 MWh to 41 million MWh.^{3,4} The notable increase in natural gas generation between 2007 and 2020 is due to economic drivers, such as increased natural gas production from shale formations, lower natural gas prices, and federal and state regulations (such as the North Carolina Clean Smokestacks Act), which resulted in the replacement of smaller, older coal units with more efficient natural gas combined cycle plants.

Figure 1: Utility and Independent Power Producers (IPP): 2007 and 2020 Generation (MWh)



³ Energy Information Administration (EIA) Form 923 Detailed Data, <https://www.eia.gov/electricity/data/eia923/> (2020 values are Early Release estimates from the currently available June 18, 2020 version).

⁴ During the COVID19 pandemic, total generation decreased by approximately 6 million MWh from 2019 levels. It will be important to see the extent to which total generation demand returns to pre-pandemic levels in the coming years.



Source: US Energy Information Administration (EIA)

Table 1 shows the changes in generation for hydroelectric, biomass, biogas, solar and wind from 2007 to 2020 for the utility and independent power producers.⁵ Solar energy represented 8.8 million MWh (7.3% of total generation) in 2020. The contribution of solar energy has exceeded that of hydroelectric power in the last two years.⁶ There are now approximately 5,000 MW of utility-scale solar projects operating in North Carolina, which is about half the capacity of operating coal plants in the state.⁷ A 208 MW onshore wind facility began operating in 2017 providing almost half a million MWh of generation. Biomass (wood-derived) and biogas now represent about 1% of total generation.

Table 1. Change in Renewable Energy Electricity Generation in North Carolina from 2007 to 2020 in MWh

Resource	2007	2014	2016	2018	2019	2020
Hydroelectric	2,974,677	4,741,591	4,403,380	6,592,491	6,184,609	6,575,465
Solar PV		652,464	3,296,077	5,998,634	7,184,159	8,818,222
Wind			6,233	542,772	523,139	546,267
Wood-Derived	432,033	892,194	695,942	694,532	716,957	613,612
Biogas	85,745	438,747	520,665	580,388	564,628	605,261

One of the key legislative initiatives that has contributed to the increase in electricity generation from RE is House Bill 589, which was enacted in 2017.⁸ This Bill requires the procurement of

⁵ EIA Detailed State Data, retrieved from <https://www.eia.gov/electricity/data/state/> (2020 values are Early Release estimates from the currently available June 18, 2020 version).

⁶ Hydroelectric generation varies from year to year based on the annual rainfall.

⁷ EIA Detailed State Data, retrieved from <https://www.eia.gov/electricity/data/state/> (2020 values are Early Release estimates from the currently available June 18, 2020 version).

⁸ Session Law 2017-192, "An Act to Reform North Carolina's Approach to Integration of Renewable Electricity Generation Through Amendment of Laws Related to Energy Policy and to Enact the Distributed Resources Access Act," July 27, 2017, <https://www.ncleg.net/Sessions/2017/Bills/House/PDF/H589v6.pdf>.

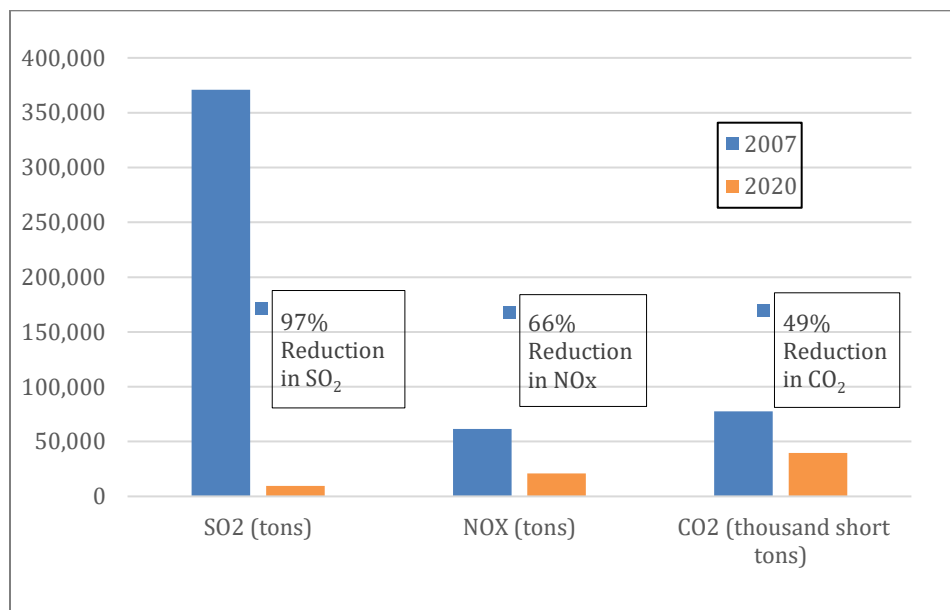


2,660 MW of solar capacity, or approximately 4.6 million MWh per year of electricity generation by 2021.⁹

B. Air Pollutant Emissions Reductions

Figure 2 presents emissions reductions from 2007 to 2020. Based on the generation profile shown in Figure 1, it is estimated that the electric power sector had emission reductions of 97%, 66%, and 49% for sulfur dioxide (SO₂), nitrogen oxides (NO_x), and carbon dioxide (CO₂), respectively.¹⁰ These reductions are primarily due to the retirement of over 3,000 MW of coal power plants and installation of emissions controls on fossil fuel plants that are still operating. A significant portion of these reductions are due to avoided fossil fuel generation resulting from REPS projects. The following sections present estimates of the amount of air pollution that was avoided from 2007 through 2020 due to the REPS.

Figure 2. North Carolina Power Plant Emissions in 2007 and 2020



Source: EPA Air Markets Program Database

Emission Reductions Due to Energy Efficiency Measures

Energy efficiency (EE) results in less demand for electricity generated by power plants; therefore, less air pollution is emitted from these power plants. To estimate the environmental benefits of EE programs, the NC North Carolina Renewable Energy Tracking System (NC RETS) is used. The NC RETS tracks the estimated amount of avoided electricity generation in MWh from EE

⁹ Assuming a 20% capacity factor for solar photovoltaic generation.

¹⁰ It is important to note that these data reflect large generators (> 25 MW) that provide power to the grid and emphasize that the COVID-19 pandemic had a significant impact on 2020 electricity sector markets, and therefore, a portion of these emission reductions may be attributable to the pandemic.

programs operated by electricity retailers subject to the REPS.¹¹ These EE programs are focused on residential and small commercial facilities.¹² Table 2 shows the number of energy efficiency certificates (EECs) issued for each year from the NC RETS publicly available data. In 2020, North Carolina issued 6,864,404 MWh of EECs, which reduced retail sales of electricity by approximately 5%. This is the equivalent of a mid-sized coal utility power plant not operating.

The North Carolina Division of Air Quality (DAQ) estimated the CO₂, NO_x, and SO₂ emissions that were not emitted due to the avoided electricity generation resulting from EE measures. For this estimation, the total EECs issued in a given year are assumed equal to the avoided electricity generation in North Carolina during that year. The estimate also assumes that all the emissions reductions would occur in North Carolina. The U.S. Environmental Protection Agency (EPA) has developed average CO₂, NO_x, and SO₂ emission factors for power plants located in the State of North Carolina, which it reports in the Emissions & Generation Resource Integrated Database (eGRID).¹³ Because these emission factors are available about every other year between 2007 and 2019, the DAQ interpolated North Carolina's emission factors for years without values and used the 2019 values to represent 2020. The air pollution not emitted by power plants was estimated as the avoided generation due to EE multiplied by the EPA eGRID emission factors.¹⁴ Because the EECs are reconciled each year, the generation and emissions values contained in previous reports may not match those shown in Table 2 for certain historical years.

The data in Table 2 show the reduction in emissions due to EE savings achieved through REPS. In 2020, EE measures resulted in 1,627 tons of NO_x and 1,136 tons of SO₂ not being emitted. The CO₂ not emitted due to EE measures is approximately 2.66 million tons, which is 6.6% of the total CO₂ emitted by power plants in North Carolina. This analysis shows that EE measures resulting from the REPS are significantly decreasing air pollution emitted in North Carolina.

Table 3 presents the 2019 eGRID emission rates per MWh for both North Carolina and the SERC Reliability Corporation / Virginia-Carolina Electricity Market Module Region (SRVC)'s grid region, which includes electric utilities operating in North Carolina, South Carolina, Virginia, and West Virginia.¹⁵ North Carolina as a state now has *higher* emission rates for all three pollutants than the regional grid. North Carolina is no longer leading the region in CO₂, NO_x, or SO₂ emissions intensity as shown below.

¹¹ North Carolina Renewable Energy Tracking System, <http://www.ncrets.org/>.

¹² Larger commercial and industrial facilities implement EE without assistance from the electricity retailers, therefore, avoided generation by these facilities is not tracked in NC RETS.

¹³ U.S. EPA, Emissions & Generation Resource Integrated Database (eGRID), available from <https://www.epa.gov/egrid/emissions-generation-resource-integrated-database-egrid>, accessed July 2021.

¹⁴ Note that the avoided generation includes electricity transmission line losses.

¹⁵ Only a very small portion of West Virginia is included in the SRVC (containing one coal-fired power plant).



Table 2. Energy Efficiency Certificates Issued and Estimated Avoided Air Pollution Emissions

Year	EECs Or Avoided Generation (MWh)	CO₂ Not Emitted (tons)	NO_x Not Emitted (tons)	SO₂ Not Emitted (tons)
2008	22,907	13,696	10	46
2009	80,008	46,266	29	79
2010	504,289	297,798	212	481
2011	1,134,040	634,228	476	836
2012	1,288,141	680,137	537	671
2013	2,119,916	1,078,895	807	917
2014	2,722,860	1,333,839	937	937
2015	6,218,251	2,871,549	1,937	1,761
2016	4,069,988	1,765,237	1,136	906
2017	4,812,048	2,005,437	1,304	931
2018	5,572,279	2,227,719	1,466	917
2019	5,658,772	2,192,802	1,341	937
2020	6,864,404	2,659,991	1,627	1,136

Table 3. 2019 eGRID Emission Rates for North Carolina and SRVC Region

Year	Area	Annual CO₂ total output emission rate (lb/MWh)	Annual NO_x total output emission rate (lb/MWh)	Annual SO₂ total output emission rate (lb/MWh)
2019	NC	775.0	0.474	0.331
2019	SRVC	675.4	0.343	0.217

Emission Reductions Due to Non-Emitting Renewable Energy Measures

The NC RETS also tracks the estimated amount of RE generation in MWh from projects receiving Renewable Energy Certificates (RECS). As of 2020, 81% of the installed RE capacity is in North Carolina. The REPS statute requires at least 75% of RECS to come from in state sources so North Carolina is exceeding this requirement and the majority of the benefits of this clean power are going to North Carolina’s citizens and economy.

There are two categories of RE generation sources: 1) sources that combust fuel such as biomass and emit air pollution, and 2) sources that do not emit air pollution such as solar. The DAQ obtained the number of RECS issued for each year by RE project type from the NC RETS, then split the generation RECS into the emitting and non-emitting sources as shown in Table 4. In 2020, non-emitting RE sources generated a total of 6,795,490 MWh of electricity while RE sources that emit air pollution generated 6,363,788 MWh of electricity. This combined generation of over 13 million MWh of electricity is equivalent to a large utility coal power plant.

The DAQ estimated the reduction in emissions using the electricity generation from non-emitting RE projects and the EPA eGRID emission factors discussed in the previous section. The DAQ



assumed that all the emissions reductions would occur in North Carolina. Table 4 presents a summary of reductions in emissions due to non-emitting RE generation projects achieved through the REPS. In 2020, non-emitting RE electricity generation resulted in 1,611 tons of NO_x and 1,125 tons of SO₂ not being emitted in the air. In addition, avoided CO₂ emissions are estimated at 2.6 million tons.

The annual avoided emissions in 2020 from both EE measures (shown in Table 2) and non-emitting RE (shown in Table 4) are summarized in Table 5. In 2020, the avoided emissions associated with REPS-certified energy efficiency/renewable energy levels were equivalent to 13%, 15%, and 24%, of 2020 North Carolina power plant CO₂, NO_x, and SO₂ emissions reported by EPA.¹⁶

Table 4. Annual RECS Generated and Estimated Avoided Air Pollution Emissions

Year	RECS from Emitting RE Sources* (MWh)	RECS from Non-Emitting RE Sources** (MWh)	CO₂ Not-Emitted (tons)	NO_x Not-Emitted (tons)	SO₂ Not-Emitted (tons)
2008	523,352	539,142	332,341	241	1,082
2009	705,098	790,184	456,941	287	778
2010	918,863	829,824	490,036	350	791
2011	2,290,003	719,672	402,487	302	531
2012	3,256,230	773,196	408,247	323	403
2013	4,005,084	1,420,290	722,832	541	614
2014	4,810,110	1,687,381	826,592	580	580
2015	4,442,271	2,131,664	984,389	664	604
2016	4,615,521	3,634,409	1,576,318	1,014	809
2017	4,891,762	4,848,953	2,020,817	1,314	938
2018	4,991,605	5,794,734	2,316,654	1,524	953
2019	5,092,945	6,445,573	2,497,692	1,528	1,067
2020	6,363,788	6,795,490	2,633,286	1,610	1,125

* Emitting sources include biomass, cogeneration, and tire-derived fuel projects.

** Non-Emitting sources include hydropower, solar, and wind projects.

¹⁶ Calculated using 2020 CO₂, NO_x, and SO₂ emissions reported in EPA’s Air Program Markets Database, which includes data for large generators (> 25 MW) that provide power to the grid.



Table 5. Total Avoided Emissions Due to REPS in 2020

REPS Program	RE & EE RECS (MWh)	CO₂ Not Emitted (tons)	NO_x Not Emitted (tons)	SO₂ Not Emitted (tons)
Non-Emitting RE	6,795,490	2,633,286	1,610	1,125
EE Measures	6,864,404	2,659,991	1,627	1,136
Total	13,659,894	5,293,277	3,237	2,261

C. Air Quality Permit Reviews

North Carolina General Statute § 62-133.8(g) requires a biomass combustion process at any new RE facility that delivers electric power to an electric power supplier to meet Best Available Control Technology (BACT). BACT is an emissions limitation for an air pollutant based on the maximum degree of emission reductions achievable for a facility considering energy, environmental, and economic impacts, and other costs. The DAQ continues to review air permit applications and make case-by-case BACT determinations for new RE facilities.

Currently, 33 facilities permitted or registered with the DAQ received RE credits under the REPS program. Since 2020, two facilities stopped operating and no facilities have come online. Most of the permitted facilities capture and utilize landfill gas at municipal solid waste landfills as shown in Table 6. The second largest category of permitted and registered facilities utilize anaerobic digestion of swine waste to produce biogas at hog operations.

Table 6. Permitted Renewable Energy Facilities with BACT Limits

Biomass Facility with BACT Limits	Number of Permitted or Registered Facilities
Landfills	16
Swine Waste	9
Poultry Litter	1
Biomass & Poultry Litter	7
Total	33

The DAQ continues to inspect and assure compliance for each BACT limit specified in a facility's operating permit. All landfills are meeting their respective BACT limits. As of the end of March 2021, the two biomass facilities combusting tire-derived fuels were permanently shut down in accordance with the Special Order of Consent negotiated with each facility, and these facility's air permits were both rescinded on April 1, 2021.

On January 31, 2019, the Western North Carolina Regional Air Quality Agency in Buncombe County received an application from Duke Energy Progress to modify the permit for its Asheville power plant to include plant-wide applicability limits for particulate matter in accordance with New Source Review regulations. The modified permit was issued in May of 2020.



D. Waste Management Permit Reviews

Thirty municipal solid waste landfills permitted by the Division of Waste Management utilize landfill gas (LFG) for energy projects. Approximately 60% are receiving RE credits under the REPS program. The majority of LFG collected at these facilities is used to generate electricity that is in turn sold to local power companies. The remaining uses are direct thermal projects that use LFG to heat nearby buildings or greenhouses or projects that involve LFG as fuel for boilers at neighboring manufacturing businesses. As reported last year, two projects are under development that will clean the LFG to pipeline quality and inject the gas into the pipeline for transportation and future sale. Construction has started for the projects and operation is expected in 2022.

E. Swine Waste to Bioenergy

Biogas can be combusted on-site to produce heat or electricity (waste-to-energy projects). The gas can also be treated and transmitted in natural gas pipelines as “renewable natural gas” (RNG) for combustion off-site to produce electricity. The potential benefits of producing biogas from swine waste include methane capture that would otherwise be emitted to the atmosphere, reducing odors from hog farms, initiating new potential revenue streams, and creating additional jobs.

The NC RETS reports more than 62,000 MW of electricity generated in 2020 from swine waste-derived biogas. There are 13 in-state Biomass–Swine Waste projects, and 5 out-of-state Biomass–Swine Waste projects currently reported in the NC RETS.

There are a total of 15 swine waste biogas facilities currently permitted in North Carolina: 8 waste-to-energy facilities and 7 RNG facilities.¹⁷ Seven of these permitted facilities appear to participate in the NC RETS program. The other permitted facilities may participate in renewable energy greenhouse gas offset programs outside of North Carolina or may choose not to participate in a renewable energy program.

During public forums for the North Carolina Clean Energy Plan, Energy Policy Council 2020 Biennial Report, and the Climate Change Risk Assessment and Resilience Plan, a number of stakeholders expressed concerns over air and water pollution from swine operations’ use of biogas technology that relies on lagoons and spray-field waste management systems. Specific concerns raised in opposition to swine waste biogas production are waterway pollution, noxious odors, and public health impacts for nearby and downstream communities, including communities with disproportionately large minority populations. Recommendations were developed for biogas that consider the concerns raised by stakeholders. These recommendations can be found in the North Carolina Clean Energy Plan Supporting Document Part 4 Stakeholder Engagement Process & Comments,¹⁸ Energy Policy Council 2020 Biennial Report,¹⁹ and in the North Carolina Climate

¹⁷ Email communication from Ravella, Ramesh, NC DEQ, Division of Water Resources, to Tammy Manning, NC DEQ, Division of Air Quality, “RE: NC Utility Commission REPS report,” August 24, 2021.

¹⁸ North Carolina Clean Energy Plan, <https://deq.nc.gov/energy-climate/climate-change/nc-climate-change-interagency-council/climate-change-clean-energy-16>.

¹⁹ North Carolina Energy Policy Council 2020 Biennial Report, Draft for Public Comment, <https://deq.nc.gov/about/divisions/energy-mineral-land-resources/energy-policy-council>.



An analysis was performed by Research Triangle Institute (RTI) International, in conjunction with Duke University and East Carolina University, to quantify biogas opportunities in North Carolina. A final draft report documenting this analysis was recently submitted to Duke Energy for review. The public release date for the report has not been determined at this time.

During 2020 and 2021, the DEQ reviewed applications, conducted public hearings, and approved multiple permits associated with the first multi-farm RNG project in North Carolina. This project includes the Align RNG, LLC facility, as well as four associated swine farm waste digester operations and gas gathering lines in Duplin County.²¹ The project, which is expected to participate in the REPS program, will produce pipeline quality RNG for the Piedmont Natural Gas pipeline. To foster communication during the permitting process, the DEQ also produced an Environmental Justice report associated with the project, which included an analysis of the demographics and socioeconomics of the surrounding community.²²

The North Carolina Legislature recently passed the North Carolina Farm Act of 2021.²³ This legislation allows for general permitting of swine waste digester systems, which facilitates a more streamlined permitting process for facilities that meet the requirements for the general permit. The DEQ will develop the requirements associated with the swine waste digester general permit over the coming months. This permitting process change is expected to increase the future use of swine farm digesters to produce on-site energy or RNG.

F. Wind Energy

One utility-scale wind energy facility (WEF) is in operation in the State. Located in Perquimans and Pasquotank counties near Elizabeth City, Avangrid’s Amazon Wind Farm North Carolina – Desert Wind operates 104 2-MW wind turbines. According to Avangrid, the facility’s permanent footprint is less than 200 acres, but is built on approximately 22,000 acres of farm fields leased from 60 local landowners. Table 7 presents Desert Wind’s generation in 2020.²⁴

Table 7. Wind Power Capacity and Generation in North Carolina

Facility	Summer Capacity (MW)	2020 Generation (MWh)
Amazon Wind Farm North Carolina – Desert Wind	208	546,267

²⁰ North Carolina Climate Change Risk Assessment and Resilience Plan, <https://deq.nc.gov/energy-climate/climate-change/nc-climate-change-interagency-council/climate-change-clean-energy-17>.

²¹ See <https://deq.nc.gov/about/divisions/water-resources/water-quality-permitting/animal-feeding-operations/swine-biogas>.

²² See <https://files.nc.gov/ncdeq/Air%20Quality/permits/align-energy/Align-Energy-EJ-Report.pdf>.

²³ Session Law (SL) 2021-78, available from <https://www.ncleg.gov/Sessions/2021/Bills/Senate/PDF/S605v7.pdf>, accessed August 2021.

²⁴ EIA Form 923 Detailed Data, retrieved from <https://www.eia.gov/electricity/data/eia923/> (2020 values are Early Release estimates from the currently available June 18, 2020 version).



A second wind farm is being proposed in Chowan County by Apex Clean Energy. The Timbermill Wind Farm could consist of up to 45 wind turbines and have a capacity of up to 189 MW.²⁵ On June 15, 2021, Timbermill Wind, LLC, submitted a Permit Preapplication Package as required by the Wind Energy Facilities Statute for the proposed Timbermill wind energy facility. The DEQ is currently reviewing this preapplication.

G. Summary

North Carolina has made great strides toward expanding its energy portfolio in a manner that meets the needs of consumers and businesses, provides greater energy diversification, and grows the economy. This analysis indicates that there have been substantial decreases in air pollutants between 2007 and 2020 due to avoided fossil fuel generation resulting from the implementation of the REPS, improving the health of many citizens and mitigating the impacts of climate change. While the COVID-19 pandemic resulted in decreases in both electricity demand and production in North Carolina, it did not impact the continued improvements in air quality and increase in renewable energy generation.

Sincerely,



Sushma Masemore, PE
Assistant Secretary for Environment

cc: Christopher Ayers, Executive Director, NC Utilities Commission Public Staff
Bill Lane, General Counsel, DEQ

²⁵ https://www.timbermillwind.com/about_timbermill.



APPENDIX 2

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. E-100, SUB 113

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of
Rulemaking Proceeding to Implement) ORDER MODIFYING THE SWINE
Session Law 2007-397) WASTE SET-ASIDE REQUIREMENTS
) AND PROVIDING OTHER RELIEF

BY THE COMMISSION: On September 25, 2020, a verified motion to modify and delay the requirements of N.C. Gen. Stat. § 62-133.8(e) was filed jointly by North Carolina Electric Membership Corporation (NCEMC); Fayetteville Public Works Commission (FPWC); EnergyUnited Electric Membership Corporation (EnergyUnited); the Tennessee Valley Authority (TVA); the Town of Waynesville (Waynesville); North Carolina Eastern Municipal Power Agency (NCEMPA); and North Carolina Municipal Power Agency Number 1 (NCMPA1) (hereinafter referred to collectively as the Joint Movants)¹ seeking Commission approval to (1) modify the swine waste set-aside requirements of the North Carolina Renewable Energy and Energy Efficiency Portfolio Standard (REPS) by delaying the compliance requirements for the electric municipal corporations (EMCs) and municipalities (Munis) for one year; (2) allow the EMCs and Munis to bank any swine waste-derived renewable energy certificates (RECs) previously or subsequently acquired for use in future compliance years; and (3) allow the EMCs and Munis to replace compliance with the swine waste set-aside requirement in 2020 with other compliance measures in accordance with N.C.G.S. § 62-133.8(b), (c), and (d). The Joint Movants state that they have individually and collectively made reasonable efforts to comply with the swine waste set-aside requirements and argue that the relief sought is in the public interest. The Joint Movants note that they are not requesting a modification of the poultry waste set-aside requirements of N.C.G.S. § 62-133.8(f) as part of this Joint Motion.

¹ NCEMPA states that it is acting in its capacity as REPS compliance aggregator for 23 North Carolina distribution electric membership corporations, two cooperatives headquartered outside of North Carolina, and three North Carolina towns which are electric power suppliers. TVA states that it is acting in its capacity as REPS compliance aggregator for Blue Ridge Mountain Electric Membership Corporation, Mountain Electric Cooperative, Tri-State Electric Membership Corporation and Murphy Electric Power Board which are electric suppliers. NCEMPA states that it is acting in its capacity as REPS compliance aggregator for its 32 member municipalities which are power suppliers. NCMPA1 asserts that it is acting in its capacity as REPS compliance aggregator for its 19 member municipalities which are electric power suppliers.

Further, based on information submitted in the Public Staff's Motion for Leave to File Supplement Comments and Supplemental Comments of Public Staff on Joint Motion to Delay the 2020 Swine Waste Set-Aside Requirements for Certain Electric Power Suppliers detailed in this Order on page 4, the term Joint Movants shall be understood to refer to the parties to this matter as well as all electric membership corporations and municipalities in North Carolina regardless of their participation as a party to the Joint Motion.

Finally, the Joint Movants request that the Commission consider and approve their motion without an evidentiary hearing because they believe that through required semiannual reports and stakeholder meetings, stakeholders and regulatory staff have ample information surrounding the EMC's and Muni's compliance efforts.

On November 20, 2020, the Commission issued an Order Requesting Comments. On November 24, 2020, the Public Staff filed a letter detailing two stakeholder meetings held in 2020 in response to the Commission's December 16, 2019 Order Modifying the Swine and Poultry Waste Set-Aside Requirements and Providing Other Relief (2019 Delay Order). The Public Staff and the North Carolina Pork Council (NCPC) filed comments on December 3 and 7, 2020, respectively. On December 4, 2020, Optima MH, LLC (Optima MH), filed a Petition to Intervene and Initial Comments. No other party filed comments on the motion. On December 9, 2020, the Commission issued an order granting Optima MH's petition to intervene.

On December 10, 2020, the Joint Movants filed a Motion for Leave to File Reply Comments. By Order dated December 14, 2020, the Commission denied the Joint Movants' motion but noted it would consider the prospective reply comments included with the Joint Movants' motion.

On December 15, 2020, the Public Staff filed a Motion for Leave to File Supplemental Comments and Supplemental Comments on the Joint Motion to Delay the 2020 Swine Waste Set-Aside Requirements for Certain Electric Power Suppliers (Supplemental Comments). The Commission granted the Public Staff's Motion and accepted its Supplemental Comments on December 21, 2020.

SUMMARY OF THE COMMENTS

In its comments Optima MH asserts that the Joint Movants have not made reasonable efforts to comply with the swine waste set-aside requirements. Optima MH states that NCEMC failed to engage in more than initial discussions with Optima MH regarding the development of a project that would produce swine waste RECs for NCEMC or any of its member cooperatives. Optima MH further states that NCEMC's failure to continue negotiations placed Optima in a "new dimension of development limbo — preventing the project from being financed and built" — and that NCEMC should have provided more detail to the Commission regarding the project in its Joint Motion. Additionally, Optima MH states that NCEMC indicated that the pricing of the swine waste RECs was the sole reason NCEMC did not negotiate further with Optima MH and that "[i]f NCEMC had diligently evaluated and accepted . . . Optima's proposal, the project could have been constructed and would have been generating RECs in 2020." Optima MH questions the Joint Movants' willingness to actually purchase swine waste RECs from its projects. Optima MH warns the Commission to be skeptical of claims that prices for swine waste RECs are unreasonable and states that an off-ramp from the statutory REPS requirements pursuant to Commission Rule R9-67 "should be deemed to be extraordinary relief and not routinely relied upon or sought as a *de facto* matter of course." Optima MH does not expressly oppose the Joint Motion but asks the Commission to keep its concerns

in the forefront in any future requests for “off-ramps from swine waste RECs set-aside requirements.”

In its comments NCPD states that it does not oppose the Joint Movants’ motion. However, NCPD expresses frustration with what it perceives as the Joint Movants’ “nonchalant approach to the set-aside requirements,” and discusses avenues which the Joint Movants can pursue more aggressively in their attempts to comply with the swine waste set-aside requirements. In stating that a new approach by the Joint Movants is warranted, NCPD recommends that as a condition of granting the Joint Movants’ motion, the Commission should require the movants, jointly and individually, to submit a detailed compliance plan showing how each intends to achieve compliance with the swine waste set-aside requirements. While NCPD desires a change in the future actions of the Joint Movants, it supports granting the Joint Movants’ requests without an evidentiary hearing.

The Public Staff’s letter detailing its two stakeholder meetings briefly summarizes the topics of discussion regarding supply-side shortages that impacted the availability of swine waste set-aside RECs and whether these shortages are due to technology, REC prices, or interconnection issues. The letter also references discussion of the challenges experienced with the swine-waste-to-energy project owned by North Carolina Renewable Power – Lumberton, LLC, including the project’s viability and impact on REC contracts, as well as an industry shift from on-farm generation to directed biogas technology. The Public Staff in its comments states that the semiannual reports of the EMCs and the Munis indicate that they are making good faith efforts to comply with the swine waste set-aside requirements but will be unable to comply in 2020. The Public Staff’s analysis of the semiannual reports concludes that “most EMC/Muni Suppliers do not have sufficient in-state swine waste RECs to comply with a 0.04% requirement, much less the 0.07% requirement” set in the 2019 Delay Order. The Public Staff indicates that requiring retirement of banked swine waste-derived RECs will deplete the supply of RECs and make compliance more difficult in subsequent years. Based upon its review of this data, the Public Staff recommends that the Commission grant the EMCs and Munis requested modifications to the swine waste set-aside requirements without an evidentiary hearing. The Public Staff requests that the Commission direct the EMCs and Munis that are subject to the semiannual filing requirement to continue to submit semiannual reports consistent with the schedule and format required by the December 1, 2015 Order Modifying the Swine and Poultry Waste Set-Aside Requirements and Providing Other Relief (2015 Delay Order) issued in this docket.

In their Reply Comments, the Joint Movants point out that NCPD and Optima MH do not request that the Joint Motion be denied, but instead their comments focus on “prospective” relief. The Joint Movants do not take issue with NCPD’s recommendation that directed biogas should continue to be explored, but they do oppose NCPD’s proposal for an additional compliance filing atop the semiannual reports currently provided. In response to Optima MH’s comments, the Joint Movants state that “an electric supplier’s status of being ‘below the statutory cap’ has never been the sole determinant of whether its compliance efforts were reasonable, nor whether a particular REC purchase contract should have been entered into.” The Joint Movants cite the Commission’s prior decision

not to inject itself in the electric power suppliers' decision-making process and state that NCEMC's decision not to contract with Optima MH was disclosed in its semiannual report. The Joint Movants further provide that both NCPD and Optima MH have provided selective information in their comments omitting information regarding a Request for Proposal (RFP) from a group including the Joint Movants and that Optima did not submit a proposal in response to the RFP.

In its Supplemental Comments the Public Staff clarifies that in its December 3 Comments, it included Carolina Power Partners (CPP)² with the Joint Movants as EMCs or Munis for purposes of its comments and recommendation even though CPP did not join the Joint Motion. Additionally, the Public Staff states that after contacting counsel with Duke Energy Carolinas, LLC (DEC),³ and Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina (DENC),⁴ even though neither DEC nor DENC is a party to the Joint Motion they authorize the Public Staff to request that the EMCs and Munis for which they provide REPS compliance services receive the same treatment provided to Joint Movants.

DISCUSSION

Pursuant to N.C.G.S. § 62-133.8(i)(2), the Commission, in developing rules implementing the REPS, shall:

Include a procedure to modify or delay the provisions of subsections (b), (c), (d), (e), and (f) of this section in whole or in part if the Commission determines that it is in the public interest to do so. The procedure adopted pursuant to this subdivision shall include a requirement that the electric power supplier demonstrate that it made a reasonable effort to meet the requirements set out in this section.

Commission Rule R8-67(c)(5) states:

In any year, an electric power supplier or other interested party may petition the Commission to modify or delay the provisions of N.C.G.S. § 62-133.8(b), (c), (d), (e) and (f), in whole or in part. The Commission may grant such petition upon a finding that it is in the public interest to do so. If an electric power supplier is the petitioner, it shall demonstrate that it has made a reasonable effort to meet the requirements of such provisions.

² CPP is not an electric power supplier under N.C.G.S. § 62-133.8 but is acting in its capacity as a compliance aggregator for the City of Concord, the City of Kings Mountain, the Town of Black Creek, the Town of Lucama, the Town of Sharpsburg, the Town of Stantonsburg, and the Town of Winterville.

³ DEC serves as the REPS compliance aggregator for Blue Ridge Electric Membership Corporation, Rutherford Electric Membership Corporation, the Town of Dallas, the Town of Forest City, and the Town of Highlands.

⁴ DENC provide REPS compliance services for the Town of Windsor.

The Commission has previously exercised this authority and delayed compliance with the swine and poultry waste set-aside requirements on several occasions by the following orders issued in this docket: the November 29, 2012 Order Modifying the Poultry and Swine Waste Set-Aside Requirements and Granting Other Relief; the March 26, 2014 Final Order Modifying the Poultry and Swine Waste Set-Aside Requirements and Providing Other Relief; the November 13, 2014 Order Modifying the Swine Waste Set-Aside Requirement and Providing Other Relief; the 2015 Delay Order; the October 17, 2016 Order Modifying the Swine and Poultry Waste Set-Aside Requirements and Providing Other Relief; the October 16, 2017 Order Modifying the Swine and Poultry Waste Set-Aside Requirements and Providing Other Relief; the October 8, 2018 Order Modifying the Swine and Poultry Waste Set-Aside Requirements and Providing Other Relief; and the 2019 Delay Order (collectively, Delay Orders).

As an initial matter the Commission considers the Joint Movants' request to consider and approve their motion without the need for an evidentiary hearing. In support of this request, the Joint Movants state that the compliance status for the swine waste set-aside requirements is essentially unchanged since the Commission issued its 2019 Delay Order. The motion is verified by Andrew M. Fusco, Vice President, Member Services and Corporate Planning, for ElectriCities of North Carolina, Inc., pursuant to Commission Rule R1-7 on behalf of the Joint Movants. The Public Staff, like the Joint Movants, recommends that the Commission approve the request without an evidentiary hearing. No party filed comments opposing this portion of the motion. Based upon the foregoing, the Commission finds that the material facts in this matter, including those contained in the Joint Movants' verified motion and in the semiannual reports filed in Docket No. E-100, Sub 113A, are uncontroverted and concludes that the motion may appropriately be decided without an evidentiary hearing.

Based on the semiannual reports submitted by the EMCs and Munis in Docket No. E-100, Sub 113A, the verified motion, the parties' comments, and the entire record herein, the Commission finds that the EMCs and Munis have made a reasonable effort to comply with the 2020 statewide swine waste set-aside requirement established by N.C.G.S. § 62-133.8(e) but will not be able to comply. Compliance with the swine waste set-aside requirements has been hindered by the fact that the technology of power production from swine waste continues to face challenges and that swine waste-to-energy projects continue to experience operational difficulties. While Optima MH asserts that had certain contracts been finalized for facility construction, it could have produced swine RECs in 2020, neither it nor any other party presented evidence that the aggregate 2020 swine waste set-aside requirement could be met.

The Commission's Delay Orders have noted that while electric power suppliers have been able to comply with the modified poultry waste set-aside requirements and some electric power suppliers have been able to comply with the modified swine waste set-aside requirements through a graduated increase in these requirements, other electric power suppliers have not been able to meet the swine waste RECs requirements. Industry advances discussed in the comments of Optima MH and NCPC indicate that encouraging developments are occurring in the technology of power production from

swine waste which, when combined with the availability of RECs banked from current and prior years, would increase the likelihood that compliance with the swine waste set-aside requirements will be achieved at some point. The Commission finds that the verified Joint Motion along with the comments filed by Optima MH, NCPC, the Reply Comments of NCEMC, and the Supplemental Comments filed by the Public Staff demonstrate that the point of achieving compliance or partial compliance with the swine waste set-aside requirements for the EMCs and Munis has not yet arrived. The Commission agrees with the Public Staff that requiring the EMCs and Munis to meet the 2020 swine waste set-aside requirement established in the 2019 Delay Order would derail the progress made to date by the EMCs and Munis and render compliance for 2020 and future years difficult or impossible. Such action is not in the public interest. Therefore, consistent with the 2019 Delay Order, the Commission determines that it is in the public interest to delay entirely the 2020 swine waste set-aside requirement for one additional year for the EMCs and Munis; allow the EMCs and Munis that have acquired swine waste RECs for 2020 REPS compliance to bank such RECs for swine waste set-aside compliance in future years; and allow the EMCs and Munis to replace compliance with the swine waste set-aside requirement in 2020 with other compliance measures in accordance with N.C.G.S. § 62-133.8(b), (c), and (d).

The Commission notes the frustration expressed by NCPC and Optima MH and agrees that aggressive problem solving will be required by all parties for the EMCs and Munis to achieve compliance with swine waste set-aside requirements. Therefore, the Commission finds that the EMCs and Munis, or their utility compliance aggregator, shall be required file with the Commission a one-time compliance plan detailing the efforts and actions they intend to take to comply with the swine waste set-aside requirements for 2021 and future years. The Commission cautions the EMCs and Munis that they are mandated to use reasonable efforts, which include consideration of novel technologies and different approaches, to comply with the swine waste set-aside requirement set forth in this order for compliance in 2021.

While the Commission does not intend to interject itself into the parties' negotiations, failure to communicate with swine waste developers is directly relevant to the question of whether the electric power suppliers have made a good faith effort to comply with the swine waste set-aside requirements. Accordingly, the Commission expects that through collaborative efforts with interested stakeholders and the Public Staff, the EMCs and Munis will be in a position to make great progress in achieving compliance with swine-waste REC reporting in the coming year. Accordingly, the EMCs and Munis should continue all reasonable efforts to comply with the swine waste set-aside requirements as modified by this Order.

IT IS, THEREFORE, ORDERED as follows:

1. That the swine waste set-aside requirements of N.C.G.S. § 62-133.8(e) for electric membership corporations and municipalities shall be, and are hereby, modified according to the following schedule:

<u>Calendar Year</u>	<u>Requirement for Swine Waste Resources</u>
2020	0.00%
2021	0.07%
2022-2024	0.14%
2025 and thereafter	0.20%

2. That the electric membership corporations and municipalities shall be allowed to bank any swine waste RECs previously or subsequently acquired for use in future compliance years and to replace compliance with the swine waste set-aside requirement in 2020 with other compliance measures pursuant to N.C.G.S. § 62-133.8(b) and (c), including the use of solar RECs beyond the requirements of N.C.G.S. § 62-133.8(d);

3. That the electric membership corporations and municipalities subject to the semiannual filing requirement shall continue to report on the schedule established in the 2015 Delay Order. These reports shall continue to include the information specified in Ordering Paragraph 3 of the Commission’s 2015 Delay Order;

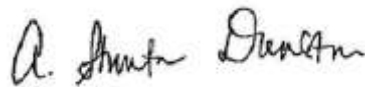
4. That, in addition to the semiannual filing requirements, the electric membership corporations and municipalities, or their utility compliance aggregator, shall be required to submit to the Commission, within six months of the date of this order, a one-time compliance plan detailing their intended efforts and actions to comply with the swine waste set-aside requirements for 2021 and future years; and

5. That the Chief Clerk is directed to deliver a copy of this Order to the NC-RETS Administrator.

ISSUED BY ORDER OF THE COMMISSION.

This the 30th day of December, 2020.

NORTH CAROLINA UTILITIES COMMISSION



A. Shonta Dunston, Deputy Clerk

STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. E-2, SUB 1106
DOCKET NO. E-7, SUB 1113
DOCKET NO. E-7, SUB 1246

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of
Request by Duke Energy Carolinas, Inc.,)
and Duke Energy Progress, Inc., for a)
Waiver of Section 5.4 of the North Carolina)
Renewable Energy Tracking System)
Operating Procedures and for a Prior Period)
Adjustment)

ORDER GRANTING WAIVER
REQUEST AND APPROVING
PRIOR PERIOD
ADJUSTMENT

BY THE COMMISSION: On May 4, 2021, Duke Energy Carolinas (DEC) and Duke Energy Progress (DEP) (collectively Duke) filed a letter requesting a prior period adjustment, a waiver of Section 5.4 of the North Carolina Renewable Energy Tracking System (NC-RETS) Operating Procedures (Operating Procedures), and that the Commission direct the NC-RETS Administrator to amend DEC's and DEP's net metering subaccounts by removing renewable energy certificates (RECs), which were incorrectly reported to NC-RETS and retired to comply with the Renewable Energy and Energy Efficiency Portfolio Standard (REPS) in 2018 and 2019 and pending retirement for 2020 compliance in the current REPS proceeding in Docket No. E-7, Sub 1246.

On June 5, 2018, the Commission issued its Order Approving Rider and Granting Waiver Request (NMNTD Order) in Docket Nos. E-2, Sub 1106 and E-7, Sub 1113, requiring DEC and DEP to use NREL's PVWatts™ Solar Calculator to estimate the generation from net metering non-TOU demand (NMNTD) customers' solar facilities, as permitted by Commission Rule R8-67(g)(2). DEC and DEP use this calculator to report the total amount of electricity produced by the NMNTD facilities under the rider directly into NC-RETS annually, and have done so since June 5, 2016.

DEC and DEP recently realized that, since June 5, 2016, the amount of net metering RECs each company has been reporting to NC-RETS annually has incorrectly included some customers on TOUD rate schedules. DEC and DEP do not own the RECs produced under the TOUD rate schedules. Upon the discovery that TOUD customers were included in the reports, Duke extensively researched its historical reports to determine the number of RECs that belong to the TOUD customers and was incorrectly included in the totals that DEC and DEP provided to NC-RETS.

From June 5, 2016, through December 31, 2020, DEC reported a total of 269,455 net metering RECs to NC-RETS, of which 67,815 actually belong to TOUD customers, leaving a total of 201,640 RECs that belong to DEC. DEC has already retired 243,671 net metering RECs for 2018-2020 REPS compliance. Duke stated in its

May 4, 2021 letter that DEC had a surplus of general RECs in its accounts to cover the shortfall created by the RECs at issue in the 2018 and 2019 compliance years, which means that DEC now needs to retire an additional 42,031 RECs in order to account for the difference.

From June 5, 2016, through December 31, 2020, DEP reported a total of 210,268 net metering RECs to NC-RETS, of which 63,301 actually belong to TOUD customers, leaving a total of 146,967 RECs that belong to DEP. DEP has only retired 13,758 of these RECs for 2019 compliance, and therefore, no changes are needed to DEP's prior REC retirements.

The Public Staff presented this matter at the Commission's Regular Staff Conference on May 10, 2021. The Public Staff recommended that the Commission approve the proposed request. The Public Staff stated that it consulted with Duke and the NC-RETS Administrator to determine the most efficient way to correct DEC's and DEP's sub-accounts to accurately reflect the correct number of RECs created by Duke's participating net metering customers and reported to NC-RETS for retirement. Based on Duke's May 4, 2021 letter and its conversations with Duke and the NC-RETS Administrator, the Public Staff recommended the Commission issue an order granting a waiver of Section 5.4 of NC-RETS Operating Procedures and requiring Duke to work with the NC-RETS Administrator to take all of the following steps:

- 1) Transfer 42,031 DE Carolinas Net Metering – NMNTD RECs that were selected for retirement for DEC's 2020 compliance currently in sub-account Pending-2446 and transfer those RECs to the NC-RETS Administrator account.
- 2) Transfer 25,784 DE Carolinas Net Metering – NMNTD RECs from sub-account Active-320 to the NC-RETS Administrator account.
- 3) Retire all 67,815 DE Carolinas Net Metering – NMNTD RECs transferred to the NC-RETS Administrator account from the sub-accounts listed above then remove them from the system.
- 4) Transfer 20,884 vintage 2017 DE Progress Net Metering – NMNTD RECs from sub-account Active 192 to the NC-RETS Administrator account.
- 5) Transfer 13,281 vintage 2018 DE Progress Net Metering – NMNTD RECs from sub-account Active 192 to the NC-RETS Administrator account.
- 6) Transfer 13,966 vintage 2019 DE Progress Net Metering – NMNTD RECs from sub-account Active 192 to the NC-RETS Administrator account.
- 7) Transfer 15,170 vintage 2020 DE Progress Net Metering – NMNTD RECs from sub-account Active 192 to the NC-RETS Administrator account.
- 8) Retire all 63,301 DE Progress Net Metering – NMNTD RECs transferred to the NC-RETS Administrator account to remove them from the system.

The Public Staff also recommended that, once the NC-RETS administrator completes these steps, DEC must select for retirement an additional 42,031 RECs in its inventory to meet its 2020 REPS Compliance Requirements and move them into sub-account Pending-2446.

On January 31, 2011, the Commission approved the Operating Procedures for users of NC-RETS in Docket No. E-100, Sub 121. Section 5.4 of the Operating Procedures addresses prior period adjustments:

Adjustments can be requested by an Account Holder, including Self-Reporting Facilities, or a [qualified reporting entity], after the [metering] data is reported and used to issue Certificates in NC-RETS. These adjustments are known as Prior Period Adjustments. . . .NC-RETS will not accept adjustments for generation reported more than one year prior.

As stated above, the NC-RETS Operating Procedures do not provide for the adjustment of RECs more than one year after the associated energy was produced. The intent of this policy is to incentivize generators and utilities to quickly address potential metering problems. In addition, the policy allows potential REC purchasers to have confidence in the validity of RECs that have been issued by NC-RETS. A majority of the RECs at issue are associated with energy generated more than one year ago; however, Duke seeks a waiver of Operating Procedure Section 5.4 in order to allow the NC-RETS Administrator to adjust the DEC and DEP NC-RETS accounts, thereby allowing DEC and DEP to correctly fulfill their REPS obligations and have accurate accounting going forward.

Based on the foregoing, the Commission finds good cause to approve the requested waiver of Operating Procedure Section 5.4 and to direct the NC-RETS Administrator to amend the DEC and DEP sub-accounts as requested by Duke.

IT IS, THEREFORE, ORDERED as follows:

1. That DEC and DEP are granted a waiver of the one-year limit on prior period adjustments contained in Section 5.4 of the NC-RETS Operating Procedures;
2. That the Companies shall work with NC-RETS Administrator to do all of the following:
 - a. Transfer 42,031 RECs that were selected for retirement for DEC's 2020 compliance currently in sub-account Pending-2446 and into the NC-RETS Administrator account;
 - b. Transfer 25,784 DE Carolinas Net Metering – NMNTD RECs from sub-account Active-320 to the NC-RETS Administrator account;

- c. Retire all 67,815 DE Carolinas Net Metering – NMNTD RECs transferred to the NC-RETS administrator account from the sub-accounts listed above then remove them from the system;
- d. Transfer 20,884 vintage 2017 DE Progress Net Metering – NMNTD RECs from sub-account Active 192 to the NC-RETS administrator account;
- e. Transfer 13,281 vintage 2018 DE Progress Net Metering – NMNTD RECs from sub-account Active 192 to the NC-RETS administrator account;
- f. Transfer 13,966 vintage 2019 DE Progress Net Metering – NMNTD RECs from sub-account Active 192 to the NC-RETS administrator account;
- g. Transfer 15,170 vintage 2020 DE Progress Net Metering – NMNTD RECs from sub-account Active 192 to the NC-RETS administrator account; and
- h. Retire all 63,301 DE Progress Net Metering – NMNTD RECs transferred to the NC-RETS administrator account to remove them from the system;

3. That DEC shall select for retirement an additional 42,031 RECs in its inventory to meet its 2020 REPS Compliance Requirements and move them into sub-account Pending-2446;

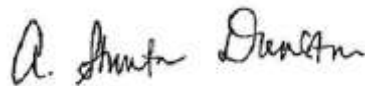
4. That Duke shall serve a copy of this Order on the NC-RETS Administrator within five business days of the date of this Order; and

5. That the NC-RETS Administrator shall file a report in Docket Nos. E-2, Sub 1106 and E-7, Subs 1113 and 1246 as to the status of DEC's and DEP's REC accounts at issue as soon as the adjustments have been completed, but no later than June 10, 2021.

ISSUED BY ORDER OF THE COMMISSION

This the 11th day of May, 2021.

NORTH CAROLINA UTILITIES COMMISSION



A. Shonta Dunston, Deputy Clerk

STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. E-2, SUB 1106
DOCKET NO. E-7, SUB 1113
DOCKET NO. E-7, SUB 1246

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of
Request by Duke Energy Carolinas, LLC,)
and Duke Energy Progress, LLC, for a)
Waiver of Section 5.4 of the North Carolina) ERRATA ORDER
Renewable Energy Tracking System)
Operating Procedures and for a Prior Period)
Adjustment)

BY THE COMMISSION: On May 10, 2021, the Commission issued an order in the above-referenced dockets granting a waiver request and approving a prior period adjustment. It has come to the Commission's attention that the Order failed to note that Chair Charlotte A. Mitchell, Commissioner ToNola D. Brown Bland, and Commissioner Daniel G. Clodfelter, did not participate.

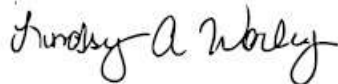
The Commission, therefore, finds good cause to issue this Errata Order to indicate that Chair Charlotte A. Mitchell, Commissioner ToNola D. Brown Bland, and Commissioner Daniel G. Clodfelter did not participate in the decision of the May 10, 2021 Order Granting Waiver Request and Approving Prior Period Adjustment.

IT IS, THEREFORE, SO ORDERED.

ISSUED BY ORDER OF THE COMMISSION.

This the 13th day of May, 2021.

NORTH CAROLINA UTILITIES COMMISSION



Lindsey A. Worley, Acting Deputy Clerk

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. SP-2147, SUB 0

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of
Public Staff Audit of Storm Hogs Power Partners, LLC Multi-Fuel Calculations) ORDER ACCEPTING REC
CALCULATIONS AND ACCEPTING
MULTI-FUEL METHODOLOGY

BY THE COMMISSION: On April 18, 2012, in Docket No. SP-1360, Sub 0, the Commission accepted the registration statement filed by William R. Storms for a 600-KW_{AC} biogas-fueled electric generating facility. On October 3, 2012, Mr. Storms and Storms Hog Power Partners, LLC (SHPP), filed an amended registration statement in Docket Nos. SP-1360, Sub 0 and SP-2147, Sub 0, stating that ownership of the facility had been transferred to SHPP. On October 9, 2013, the Commission issued an order accepting the amended registration statement filed by SHPP.

On October 9, 2014, SHPP filed a letter with the Commission stating that the facility had begun using multiple types of substrates in its anaerobic digester and included an example of its renewable energy certificate (REC) multi-fuel calculations, as required by Appendix C to the NC-RETS Operating Procedures for renewable energy facilities that use multiple types of fuel. In the letter, SHPP also requested that thermal energy from the generator used to heat the anaerobic digester be eligible to earn thermal RECs.

On October 21, 2014, the Public Staff filed a letter with the Commission stating that it had reviewed the multi-fuel calculations filed by SHPP and as a result of the review, recommended that the multi-fuel calculations be accepted. In its letter the Public Staff further recommended that the Commission not allow thermal energy from the generator used to heat the anaerobic digester to be eligible to earn RECs because this type of energy demand is parasitic or station service.

On December 18, 2018, the Public Staff filed a letter in this docket initiating an audit of the SHPP renewable energy facility and requesting certain records from SHPP regarding its fuel types and its calculations of RECs.

On March 19, 2019, the Public Staff filed copies of correspondences with SHPP requesting additional information for its ongoing audit.

On October 11, 2019, the Public Staff filed a letter with the Commission providing the status of its audit of SHPP and recommendations for addressing the Public Staff's concerns with SHPP's inaccurate REC calculations and submissions to NC-RETS. The Public Staff also reiterated its previous advice to SHPP that SHPP seek both technical

assistance and legal advice when responding to the data requests and when participating in this investigation.

On February 8, 2021, SHPP filed its response to the preliminary findings of the Public Staff's investigation. SHPP provided revised REC calculations supporting the fuel mix used by the facility from February 2017 through September 2019. SHPP further responded that it stopped using fuel types other than swine waste and poultry waste in September 2019.

On February 15, 2021, the Public Staff filed its audit findings based on its analysis and review of SHPP's responses and provided its recommendations to the Commission. The Public Staff stated that SHPP has provided adequate calculations for RECs from August 2017 through September 2019 and has demonstrated the ability to properly calculate RECs from October 2019 going forward.

DISCUSSION AND CONCLUSIONS

In its original registration statement filed with the Commission in Docket No. SP-1360, Sub 0 on April 18, 2012, which was later transferred to Docket No. SP-2147, Sub 0 on October 13, 2013, SHPP indicated that the facility would generate electricity through the use of biogas produced from anaerobic digestion of swine waste. The Commission accepted these registration statements at that time based on SHPP's assertions.

On October 9, 2014, SHPP notified the Commission that it began including poultry-derived feedstock into the anaerobic digester and provided multi-fuel calculations to support the determination of the relative energy content of each of the fuel sources. SHPP provided the appropriate multi-fuel calculations, as required by Appendix C to the NC-RETS Operating Procedures for renewable energy facilities that use multiple types of fuel. Additionally, SHPP requested that thermal energy from the generator used to heat the anaerobic digester be eligible to earn thermal RECs. The Public Staff reviewed those calculations and filed a letter with the Commission on October 21, 2014, stating that they should be accepted. With regard to SHPP's request that thermal energy from the generator used to heat the anaerobic digester be eligible to earn thermal RECs, the Public Staff recommended that the Commission not allow thermal energy from the generator used to heat the anaerobic digester to be eligible to earn RECs because this type of energy demand is parasitic or station service.

In December of 2018, the Public Staff alerted the Commission as well as SHPP that it was beginning an audit of the books and records of SHPP regarding the issuance of RECs to the facility. In the letter, the Public Staff requested detailed information regarding the multi-fuel calculations from SHPP. As of March 2019, this audit was still ongoing.

The Public Staff finalized its investigation in October 2019 and filed its findings and recommendations with the Commission on October 11, 2019. The Public Staff found that

based on its audit and investigation that beginning in approximately August 2017, SHPP began receiving materials from Liquid Environmental Systems (LES), including water and grease trap waste, that were not identified in SHPP's previously approved registration statement, nor were they included in the multi-fuel calculations that the Public Staff reviewed and recommended for Commission approval on October 21, 2014. The Public Staff stated that these modifications to the fuel inputs used in its anaerobic digester were not documented in a timely fashion in SHPP's registration statement or multi-fuel calculations, as required in Commission Rule R8-67(h). The Public Staff concluded that the RECs that were earned by SHPP in the NC-RETS Tracking System since August 2017 are not reflective of the electrical energy attributable to each of the renewable fuels utilized by the facility.

To address these concerns, the Public Staff recommended that the Commission issue an order directing SHPP to file the following information in this docket within 60 days: (1) an amended registration statement and updated multi-fuel calculations that includes all potential fuel types utilized by SHPP in its anaerobic digester; (2) proper laboratory analysis of representative samples from all of the fuel types used by SHPP to determine the relative heat content of each fuel; and (3) a sampling protocol going forward to ensure that the heat content of each fuel type is accurately calculated and supports the amount of electrical energy attributable to each of the fuels. Upon receipt and review of this information, the Public Staff stated it would make further recommendations to the Commission regarding whether some portion of the RECs earned by the facility since August 2017 should be reclassified as general biomass RECs, as opposed to being considered swine waste RECs and whether any other adjustments to the information in the NC-RETS tracking system may be appropriate. Further, the Public Staff noted that it had repeatedly recommended that SHPP seek both technical assistance and legal advice in responding to the data requests and participating in this investigation and reiterated this recommendation due to the complex nature of the issues under investigation.

SHPP provided a response to the Public Staff's findings on February 8, 2021. In that response, SHPP stated it had enlisted the assistance of Duke Energy Carolinas, LLC (DEC) to further evaluate the number of swine waste RECs and general biomass RECs produced by the facility. SHPP provided revised REC calculations supporting the fuel mix used by the facility from February 2017 through September 2019, which it stated was the period of time SHPP utilized the materials from LES. These revised calculations were provided as Attachments 1a and 1b to SHPP's REC Multi-Fuel Calculations submitted on February 8, 2021. SHPP stated that it stopped using fuel types other than swine waste and poultry waste in September 2019.

In its REC Multi-Fuel Calculations filing, SHPP proposed to use the energy values derived in the Tillamook County Bioenergy Feasibility Study Report (Tillamook Study) (which it provided as an attachment) in order to determine the potential energy content of the grease trap waste used from February 2017 through September 2019 and to better allocate the RECs earned by fuel type. SHPP stated that based on the revised multi-fuel methodology calculations, the new proposed split of RECs for this period would reduce the number of swine RECs produced during this time period from 6,816 to 5,301, a

difference of 1,515 swine RECs. This difference would be considered general biomass RECs for DEC in its NC-RETS account as opposed to swine waste RECs. SHPP asserted that DEC has agreed to work with SHPP and the NC-RETS Administrator to ensure the appropriate changes to historical RECs balances are reflected.

In its REC Multi-Fuel Calculations filing, SHPP stated that it had worked with the Public Staff to update the multi-fuel calculations which will be used at the facility beginning in October 2019 and included those calculations thereto as Attachments 3a and 3b. SHPP further agreed that going forward, prior to beginning to use other fuel types in the future, it will notify the Commission and file an updated multi-fuel methodology for approval. Also, consistent with the Public Staff recommendations, SHPP will sample and analyze each waste stream on a quarterly basis to determine its Total Solids and Volatile Solids.

On February 15, 2021, the Public Staff filed the results of its audit. In the audit letter, the Public Staff agreed with SHPP's use of the Tillamook Study because it provides the typical energy content of the fuels used from August 2017 through September 2019, and because testing data for the actual fuels used by SHPP was not available. The Public Staff also stated that it agrees with the calculations filed by SHPP but believes that the first month that it used the LES waste in its digester was August 2017, not February 2017, as indicated in SHPP's REC Multi-Fuel Calculations cover letter. Additionally, the Public Staff stated that the correct REC quantities listed in SHPP's cover letter should be 4,418 swine waste RECs and 2,021 general biomass RECs earned from August 2017 through September 2019. The Public Staff stated that it had contacted SHPP and SHPP authorized the Public Staff to indicate that it agrees with the Public Staff's revisions.

As a result of its audit and SHPP's responses, the Public Staff stated that it believes that SHPP has provided adequate calculations for RECs from August 2017 through September 2019 and has demonstrated the ability to properly calculate RECs from October 2019 going forward. Finally, the Public Staff recommended that the Commission issue an order: (1) accepting the REC calculations filed by SHPP in Attachments 1a and 1b; (2) directing the NC-RETS Administrator to alter the quantities of swine waste RECs, poultry waste RECs, and general biomass waste RECs that SHPP earned from August 2017 through September 2019 as shown in Attachments 1a and 1b; (3) accepting the multi-fuel methodology proposed by SHPP in Attachments 3a and 3b; (4) requiring that, prior to beginning to use other fuel types in the future, SHPP notify the Commission and file an updated multi-fuel methodology for approval; and (5) requiring SHPP to sample and analyze each waste stream on a quarterly basis to determine its Total Solids and Volatile Solids, as recommended by the Public Staff.

The Commission is encouraged that SHPP has agreed to many of the recommendations already set out by the Public Staff and acknowledges that it has taken a considerable amount of time for the parties to reach a conclusion in this proceeding. Based on the foregoing and the record in this proceeding, the Commission concludes that the Public Staff's recommendations are reasonable and appropriate and should be accepted.

IT IS, THEREFORE, ORDERED as follows:

1. That the REC calculations filed by SHPP in Attachments 1a and 1b to its REC Multi-Fuel Calculations and agreed to by the Public Staff are accepted;
2. That the NC-RETS Administrator shall adjust SHPP's account to reflect the amended quantities of swine waste RECs, poultry waste RECs, and general biomass waste RECs that SHPP earned from August 2017 through September 2019 as shown in Attachments 1a and 1b to its REC Multi-Fuel Calculations;
3. That the multi-fuel methodology agreed to by the parties is accepted;
4. That SHPP shall, prior to beginning to use other fuel types in the future, notify the Commission and file an updated multi-fuel methodology for approval;
5. That SHPP shall sample and analyze each waste stream on a quarterly basis to determine its Total Solids and Volatile Solids, as recommended by the Public Staff; and
6. That SHPP's load ratio share calculation and the resulting allocated share of the aggregate poultry waste set-aside requirement for 2017, 2018, 2019, 2020, and 2021 shall remain unchanged.

ISSUED BY ORDER OF THE COMMISSION.

This the 11th day of June, 2021.

NORTH CAROLINA UTILITIES COMMISSION



Lindsey A. Worley, Acting Deputy Clerk

APPENDIX 3

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. E-100, SUB 130
DOCKET NO. EMP-20, SUB 1
DOCKET NO. EMP-21, SUB 1
DOCKET NO. EMP-22, SUB 1
DOCKET NO. EMP-30, SUB 1
DOCKET NO. EMP-73, SUB 0
DOCKET NO. RET-14, SUB 0
DOCKET NO. RET-16, SUB 0
DOCKET NO. RET-18, SUB 0
DOCKET NO. RET-24, SUB 1
DOCKET NO. RET-24, SUB 2
DOCKET NO. RET-30, SUB 0
DOCKET NO. RET-31, SUB 0
DOCKET NO. RET-32, SUB 0
DOCKET NO. SP-203, SUB 1
DOCKET NO. SP-203, SUB 2
DOCKET NO. SP-798, SUB 0
DOCKET NO. SP-1015, SUB 1
DOCKET NO. SP-3523, SUB 0
DOCKET NO. SP-3606, SUB 0
DOCKET NO. SP-4752, SUB 0
DOCKET NO. SP-7200, SUB 0

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of)	
Revocation of Registration of Renewable)	ORDER REVOKING REGISTRATION
Energy Facilities and New Renewable)	OF RENEWABLE ENERGY
Energy Facilities Pursuant to)	FACILITIES AND NEW RENEWABLE
Rule R8-66(f) – 2020)	ENERGY FACILITIES

BY THE COMMISSION: On August 31, 2020, the Commission issued an Order giving notice of its intent to revoke the registration of 210 renewable energy facilities and new renewable energy facilities because the owners had not completed or filed the annual certification required each April 1 as detailed in Commission Rule R8-66(b)(9). According to Commission records and records maintained in the North Carolina Renewable Energy Tracking System (NC-RETS), the owners of the 21 renewable energy facilities or new renewable energy facilities listed in Appendices A and B did not complete their annual certification on or before October 1, 2020, as required by the Commission's August 31, 2020 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 of the 21 facilities listed in Appendices A and B effective October 1, 2020.

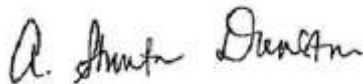
IT IS, THEREFORE, ORDERED as follows:

1. That the registrations previously approved by the Commission for the 21 facilities listed in Appendices A and B shall be, and are hereby, revoked effective October 1, 2020;
2. That the NC-RETS Administrator shall not allow the owners of the facilities listed in Appendices A and B to establish those facilities as "projects" in NC-RETS;
3. That the NC-RETS Administrator shall not allow any NC-RETS account holder to import from the facilities listed in Appendices A and B renewable energy certificates (RECs) that are dated October 1, 2020 or later;
4. That any RECs dated October 1, 2020, or later earned by one of the facilities listed in Appendices A and B whose registration has been revoked pursuant to this Order are ineligible to be used by an electric power supplier for compliance with the Renewable Energy and Energy Efficiency Portfolio Standard (REPS);
5. That in the future, should the owner of a facility whose registration has been revoked pursuant to this Order wish to have the energy output from its facility become eligible for compliance with the Renewable Energy and Energy Efficiency Portfolio Standard (REPS), the owner must again register the facility with the Commission;
6. That the NC-RETS Administrator shall post a copy of this Order on the home page of the NC-RETS website;
7. That the Chief Clerk shall serve a copy of this Order on all of the parties listed in Docket No. E-100, Sub 113;
8. That the Chief Clerk shall serve a copy of this Order on each of the renewable energy facilities and new renewable energy facilities listed on Appendix A and Appendix B hereto by means of United States certified mail, return receipt requested; and
9. That the Chief Clerk shall transmit a copy of this Order to the NC-RETS Administrator.

ISSUED BY ORDER OF THE COMMISSION.

This the 15th day of March, 2021.

NORTH CAROLINA UTILITIES COMMISSION



A. Shonta Dunston, Deputy Clerk

Revocation of Registered Facilities <i>(NC-RETS Participants)</i>		
Docket Number	Facility Owner	State
SP-1015, Sub 1	Commonwealth Brands, Inc.	NC
SP-3523, Sub 0	Leon Parker	NC
SP-798, Sub 0	Pine Hurst Farm Acres Partnership	NC

Revocation of Registered Facilities (Non NC-RETS Participants)		
Docket Number	Facility Owner	State
EMP-20, Sub 1	Exelon Wind 4, LLC	TX
EMP-21, Sub 1	Exelon Wind 9, LLC	TX
EMP-22, Sub 1	Exelon Wind 10 LLC	TX
EMP-30, Sub 1	Story Wind, LLC	IA
EMP-73, Sub 0	Fenton Power Partners, LLC	MN
RET-14, Sub 0	The Market Place Restaurant	NC
RET-16, Sub 0	Kananga Conferences, Inc.	NC
RET-18, Sub 0	West End Bakery	NC
RET-24, Sub 1	FLS Solar 60, LLC	NC
RET-24, Sub 2	FLS Solar 60, LLC	NC
RET-30, Sub 0	FLS Owner III, LLC	NC
RET-31, Sub 0	FLS Owner VII, LLC	NC
RET-32, Sub 0	FLS Owner IV, LLC	NC
SP-203, Sub 1	Aquesta Bank	NC
SP-203, Sub 2	Aquesta Bank	NC
SP-3606, Sub 0	Battleboro Solar, LLC	NC
SP-4752, Sub 0	ESA Princeton 2 NC, LLC	NC
SP-7200, Sub 0	Lucky Clays Farm & Forestry, LLC	NC

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. E-100, SUB 130

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of
Revocation of Registration of Renewable Energy Facilities and New Renewable Energy Facilities Pursuant to Rule R8-66(f) - 2021) ORDER GIVING NOTICE OF INTENT TO REVOKE REGISTRATION OF RENEWABLE ENERGY FACILITIES AND NEW RENEWABLE ENERGY FACILITIES

BY THE COMMISSION: Pursuant to Commission Rule R8-66(b), for renewable energy certificates (RECs) earned by a renewable energy facility or new renewable energy facility to be eligible for use by an electric power supplier for compliance with the Renewable Energy and Energy Efficiency Portfolio Standard (REPS), the owner of the facility shall register it with the Commission as a renewable energy facility or new renewable energy facility and thereafter file an annual certification of compliance with the conditions of continuation of the registration. Each Commission order approving the registration of a renewable energy facility or new renewable energy facility states that the owner of the facility shall annually file the information required by Commission Rule R8-66 on or before April 1 of each year. Specifically, Commission Rule R8-66(b)(9) states that annual certifications are due April 1 of each year, and that owners of facilities that are registered as projects in the North Carolina Renewable Energy Tracking System (NC-RETS) may complete their annual certification electronically via the NC-RETS system. Pursuant to Commission Rule R8-66(f), failure to file an annual certification may result in the revocation of a facility's registration.

According to records maintained in NC-RETS, 23 renewable energy facilities and/or new renewable energy facilities registered in NC-RETS (listed in Appendix A of this Order) have not completed the on-line annual certification that was due April 1, 2020. In addition, 116 renewable energy facilities and/or new renewable energy facilities that are registered with the Commission, but that are not registered as projects in NC-RETS (listed in Appendix B of this Order) have not filed with the Commission the annual certification that was due April 1, 2021.

The Commission, therefore, finds good cause to notice its intent to revoke, as of October 15, 2021, the registration of any facility listed in Appendix A of this Order, unless the owner of the facility completes the on-line certification on or before that date. Further, the Commission finds good cause to notice its intent to revoke, as of September 15, 2021, the registration of any facility listed in Appendix B of this Order, unless the owner of the facility files the verified certification required by Rule R8-66(b) (attached as Appendix C of this Order) on or before that date. Finally, the Commission

concludes that it is appropriate to waive the 2021 annual certification requirement in Rule R8-66(b) for recently registered facilities that received orders accepting a registration statement after January 1, 2021.

IT IS, THEREFORE, ORDERED as follows:

1. That the Commission shall issue orders revoking the registration of any renewable energy facilities and/or new renewable energy facilities listed in Appendix A as of October 15, 2021, unless the owner of the facility completes the on-line certification required by Rule R8-66(b) on or before that date;

2. That the Commission shall issue orders revoking the registration of any renewable energy facility and/or new renewable energy facility listed in Appendix B as of October 15, 2021, unless the owner of the facility files the verified certification required by Rule R8-66(b) (attached as Appendix C of this Order) on or before that date;

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

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

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

6. That the Chief Clerk shall transmit a copy of this Order to the NC-RETS Administrator.

ISSUED BY ORDER OF THE COMMISSION.

This the 16th day of September, 2021.

NORTH CAROLINA UTILITIES COMMISSION



Joann R. Snyder, Deputy Clerk

Registered Facilities Pending Revocation (NC-RETS Participants)		
Docket Number	Facility Owner	State
SP-2736, Sub 0	Ashley Solar Farm, LLC	NC
SP-1330, Sub 0	Lemuel D. Black	NC
SP-2524, Sub 0	Amethyst Solar, LLC	NC
SP-2218, Sub 0	Audrey Solar, LLC	NC
SP-1965, Sub 0	Milo Solar, LLC	NC
SP-1967, Sub 0	Minnie Solar, LLC	NC
SP-2156, Sub 0	Owen Solar, LLC	NC
SP-2061, Sub 0	Sophie Solar, LLC	NC
SP-2573, Sub 0	Star Solar, LLC	NC
SP-4, Sub 4	Deep River Hydro, Inc.	NC
SP-3930, Sub 0	Stikeleather Farm, LLC	NC
SP-3145, Sub 0	Yadkin 601 Farm, LLC	NC
SP-842, Sub 1	DDM Mortgage Corporation	NC
SP-294, Sub 0	Hamlin Family, LLC	NC
SP-3079, Sub 0	Janet & Jennifer Long	NC
SP-3405, Sub 0	Lang Solar Farm, LLC	NC
SP-373, Sub 0	SunE NC Edison Progress 1, LLC	NC
SP-1034, Sub 0	Loyd Ray Farms, Inc.	NC
SP-957, Sub 1	Patrick Yarn Mills, Inc.	NC
SP-362, Sub 1	QVC, Inc.	NC
SP-362, Sub 3	QVC, Inc.	NC
RET-3 Sub 0	Town Square West, LLC	NC
SP-10438, Sub 1	Matthews Keys	NC

Registered Facilities Pending Revocation (Non NC-RETS Participants)		
Docket Number	Facility Owner	State
EMP-25, Sub 0	Scurry County Wind II, LLC	TX
EMP-26, Sub 0	Turkey Track Wind Energy, LLC	TX
EMP-27, Sub 0	McAdoo Wind Energy, LLC	TX
EMP-28, Sub 0	Stanton Wind Energy, LLC	TX
EMP-68, Sub 0	Minco Wind III, LLC	OK
EMP-75, Sub 0	Goldthwaite Wind Energy, LLC	TX
EMP-87, Sub 0	Miami Wind I, LLC	TX
EMP-100, Sub 0	Enel Green Power Diamond Vista Wind, LLC	KS
RET-11, Sub 0	Camp Rock for Boys	NC
RET-13, Sub 0	Green Sage Coffeehouse & Cafe	NC
RET-19, Sub 0	Mighty Good Eats	NC
SP-677, Sub 0	Renewable Energy Business Group, Inc.	NC
SP-764, Sub 2	Hessler, LLC	NC
SP-779, Sub 0	Grandfather Mountain Stewardship Foundation	NC
SP-844, Sub 1	Tropical Nut & Fruit Co.	NC
SP-1246, Sub 0	Stephen & AJ Coutu	NC
SP-1336, Sub 0	Raymond Wisniewski	PA
SP-1375, Sub 0	Wright of Thomasville	NC
SP-1413, Sub 2	Paul Kazmer	NC
SP-1536, Sub 0	Sunrise NC Daughter Lessee, LLC	NC
SP-1537, Sub 0	Sunrise NC Khan Lessee, LLC	NC
SP-1540, Sub 0	Sunrise NC Martin 1 Lessee, LLC	NC
SP-1541, Sub 0	Sunrise NC Alexander Lessee, LLC	NC
SP-1542, Sub 0	Sunrise NC Shields Lessee, LLC	NC
SP-1543, Sub 0	Sunrise NC Hindsman Lessee, LLC	NC
SP-2092, Sub 0	Rick Sylvester	NC
SP-2094, Sub 1	Town of Cary	NC
SP-2222, Sub 1	Tyson Furniture	NC
SP-2498, Sub 1	Jakana Solar, LLC	NC
SP-2515, Sub 1	Williamston Solar, LLC	NC
SP-3079, Sub 1	John & Janet Long	NC
SP-3116, Sub 1	Wayne Cooley	NC

SP-3345, Sub 1	Duke University	NC
SP-3993, Sub 0	Lynne E. Bresler & Michael J Vaught	NC
SP-3468, Sub 0	Raylen Vineyards Solar, LLC	NC
SP-3701, Sub 0	Mount Olive I, LLC	NC
SP-3825, Sub 0	Osborne Brothers Electric, LLC	NC
SP-3828, Sub 0	Sedberry Farm, LLC	NC
SP-3853, Sub 0	Perdue Farms, Inc.	NC
SP-4225, Sub 0	Siler 421 Farm, LLC	NC
SP-4349, Sub 0	Highland Brewing Company, Inc.	NC
SP-4535, Sub 0	James Miller	NC
SP-4607, Sub 0	Northern Cardinal Solar, LLC	NC
SP-4616, Sub 0	Chickenfoot Solar, LLC	NC
SP-4767, Sub 0	Cotton Farm, LLC	NC
SP-4824, Sub 0	Carl Friedrich Gauss Solar, LLC	NC
SP-4891, Sub 0	Fresh Air XXIII, LLC	NC
SP-4894, Sub 0	Fresh Air XXIX, LLC	NC
SP-4895 Sub 0	Fresh Air XXXI, LLC	NC
SP-4927, Sub 0	Daniela & Thomas Doyle	NC
SP-4970, Sub 0	Country Farm Solar, LLC	NC
SP-5136, Sub 0	TWC Administration, LLC	NC
SP-5190, Sub 0	Daniel Kluthe	NC
SP-5241, Sub 0	Red Toad Phase 2 Buffalo Road, LLC	NC
SP-5251, Sub 0	Red Oak Solar Farm, LLC	NC
SP-5389, Sub 0	Wilson Solar Farm 7, LLC	NC
SP-5390, Sub 0	Wilson Solar Farm 6, LLC	NC
SP-5391, Sub 0	Wilson Solar Farm 5, LLC	NC
SP-5392, Sub 0	Wilson Solar Farm 4, LLC	NC
SP-5393, Sub 0	Wilson Solar Farm 3, LLC	NC
SP-5394 Sub 0	Wilson Solar Farm 2, LLC	NC
SP-5395, Sub 0	Wilson Solar Farm 1, LLC	NC
SP-5427, Sub 0	Jackson Solar Farm, LLC	NC
SP-5858, Sub 0	Gettysburg Energy and Nutrient Recovery Facility	PA
SP-5885, Sub 0	Canon Farm, LLC	NC
SP-6088, Sub 0	Swift Creek Farm, LLC	NC
SP-7017, Sub 1	Jersey Solar, LLC	NC
SP-7095, Sub 1	BRE NC Solar 2, LLC	NC

SP-7097, Sub 1	BRE NC Solar 4, LLC	NC
SP-7126, Sub 0	HCE Columbus I, LLC	NC
SP-7164, Sub 0	Boston Farm Solar, LLC	NC
SP-7680, Sub 0	Riverboat Farm, LLC	NC
SP-7687, Sub 0	Greensboro Eco System, LLC	NC
SP-7828, Sub 0	Wendell Solar Farm, LLC	NC
SP-7916, Sub 0	Sellers Farm Solar, LLC	NC
SP-7922, Sub 0	Armada Solar, LLC	NC
SP-7925, Sub 0	McGrigor Farm Solar, LLC	NC
SP-8025, Sub 0	Tamworth Holdings, LLC	NC
SP-8038, Sub 0	Marchpast Solar, LLC	NC
SP-8102, Sub 0	Shieldwall Solar, LLC	NC
SP-8130, Sub 0	Story Creek Farm Solar, LLC	NC
SP-8222, Sub 0	Quincy Farm, LLC	NC
SP-8225, Sub 0	River Forks Farm, LLC	NC
SP-8226, Sub 0	Truman Farm, LLC	NC
SP-8276, Sub 0	Grays Mills Solar, LLC	NC
SP-8278, Sub 0	Pitt County Solar, LLC	NC
SP-8316, Sub 0	Cumberland Solar, LLC	NC
SP-8363, Sub 0	Morgan Sellers Solar, LLC	NC
SP-8398, Sub 0	Tanager Holdings, LLC	NC
SP-8431, Sub 0	Saw Solar, LLC	NC
SP-8517, Sub 0	Taft Farm, LLC	NC
SP-8583, Sub 0	Parker Solar Farm, LLC	NC
SP-8603, Sub 0	Faraday Farm, LLC	NC
SP-8748, Sub 0	Cool Springs Solar, LLC	NC
SP-9418, Sub 3	Lenova (United States), Inc.	NC
SP-9418, Sub 6	Lenova (United States), Inc.	NC
SP-9418, Sub 7	Lenova (United States), Inc.	NC
SP-9831, Sub 0	Panda Solar NC 10, LLC	NC
SP-9832, Sub 0	Panda Solar NC 11, LLC	NC
SP-10180, Sub 0	Gonzales Winery Sales, LLC	CA
SP-10182, Sub 0,	Green Valley Solar, LLC	CA
SP-10183, Sub 0	Auburn Solar, LLC	CA
SP-10184, Sub 0	COR Solar, LLC	CA
SP-10394, Sub 0	Dorothy Solar, LLC	NC
SP-11345, Sub 0	Boxer Solar	NC

SP-11809, Sub 0	Williamsburg Solar, LLC	NC
SP-16459, Sub 0	House Swartz, LLC	NC
SP-17249, Sub 0	State of North Carolina, North Carolina Dept. of Natural & Cultural	NC
SP-20162, Sub 0	Wilkes Solar, LLC	NC
SP-23108, Sub 0	Midland Solar, LLC	NC
SP-25306, Sub 0	Cherokee Falls Hydroelectric Project, LLC	NC
SP-26175, Sub 0	BNRG-NC3 Ahoskie, LLC	NC
SP-26176, Sub 0	BNRG-NC4 Ahoskie, LLC	NC
SP-26177, Sub 0	BNRG-NC5 Ahoskie West, LLC	NC
SP-26178, Sub 0	NC1 Ahoskie Central, LLC	NC
SP-26182, Sub 0	NC6 Ahoskie East, LLC	NC

Annual Certification of Compliance with the Requirements of Commission Rule R8-66 for the Continuation of the Registration of a Renewable Energy Facility or New Renewable Energy Facility.

Docket No. _____ - _____

Facility Owner: _____

<input type="checkbox"/> YES	<input type="checkbox"/> NO	<p>I certify that the facility is in substantial compliance with all federal and state laws, regulations, and rules for the protection of the environment and conservation of natural resources.</p>
<input type="checkbox"/> YES	<input type="checkbox"/> NO	<p>I certify that the facility satisfies the requirements of G.S. 62-133.8(a)(5) or (7) as a (select one) <input style="width: 200px;" type="text" value="Renewable Energy Facility"/></p> <p>and that the facility will be operated as a (select one): <input style="width: 200px;" type="text" value="Renewable Energy Facility"/></p> <p>To determine whether your facility meets either of these definitions, you should check your registration order or consult your legal counsel.</p>
<input type="checkbox"/> YES	<input type="checkbox"/> NO	<p>I certify that 1) my organization is not simultaneously under contract with NC GreenPower to sell our RECs emanating from the same electricity production being tracked in NC-RETS; and 2) any renewable energy certificates (whether or not bundled with electric power) sold to an electric power supplier to comply with G.S. 62-133.8 have not, and will not, be remarketed or otherwise resold for any other purpose, including another renewable energy portfolio standard or voluntary purchase of renewable energy certificates in North Carolina (such as NC GreenPower) or any other state or country, and that the electric power associated with the certificates will not be offered or sold with any representation that the power is bundled with renewable energy certificates.</p>
<input type="checkbox"/> YES	<input type="checkbox"/> NO	<p>I certify that I consent to the auditing of my organization's books and records by the Public Staff insofar as those records relate to transactions with North Carolina electric power suppliers, and agree to provide the Public Staff and the Commission access to our books and records, wherever they are located, and to the facility.</p>
<input type="checkbox"/> YES	<input type="checkbox"/> NO	<p>I certify that I am the owner of the renewable energy facility or am duly authorized to act on behalf of the owner for the purpose of this filing.</p>

(Signature)

(Title)

(Name - Printed or Typed)

(Date)

VERIFICATION

STATE OF _____ COUNTY OF _____

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

WITNESS my hand and notarial seal, this _____ day of _____, 20_____.

My Commission Expires: _____

Signature of Notary Public

Name of Notary Public – Typed or Printed

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

Chief Clerk's Office
North Carolina Utilities Commission
4325 Mail Service Center
Raleigh, North Carolina 27699-4300