STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. E-100, SUB 113 DOCKET NO. E-100, SUB 121

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

)
)))
 ORDER AMENDING RULES R8-64 THROUGH R8-69 AND APPROVING FINAL OPERATING PROCEDURES
) FOR NC-RETS
)
)

BY THE COMMISSION: By its Orders issued on September 4, 2009, and on February 4, 2010, the Commission invited interested parties to propose amendments to Commission Rules R8-64 through R8-69 for the purpose of streamlining the administration of Session Law 2007-397 (Senate Bill 3) and the State's Renewable Energy and Energy Efficiency Portfolio Standard (REPS).

On January 27, 2010, the Commission issued an Order in Docket No. E-100, Subs 113 and 121 requesting comments on proposed amendments to Rule R8-67 regarding the participation of electric power suppliers and renewable energy facilities¹ in the North Carolina Renewable Energy Tracking System (NC-RETS). The Commission proposed amendments to Rule R8-67, the rule that addresses implementation of REPS. Because the proposed rule changes to Rule R8-67 overlap with the parties' proposed changes to streamline the administration of Senate Bill 3, the Commission is addressing both rulemaking efforts in this Order.

On July 1, 2010, the Commission issued an Order Adopting Interim Operating Procedures for REC Tracking System in Docket No. E-100, Sub 121, in which it adopted, on an interim basis, procedures detailing the circumstances under which the NC-RETS Administrator is authorized to issue renewable energy certificates (RECs)

¹ Throughout this Order, the phrase "renewable energy facility(ies)" includes "new renewable energy facilities."

and energy efficiency certificates (EECs). The Interim Operating Procedures were developed within the NC-RETS Stakeholder Group. The Commission's Order stated:

Proposed rule changes regarding implementation of Session Law 2007-397, including additional new rules addressing the renewable energy certificate (REC) tracking system, are pending before the Commission in this Docket as well as in Docket No. E-100, Sub 113. The Commission anticipates issuing an order regarding those rules shortly and allowing parties to comment as to whether there are any conflicts or inconsistencies between the proposed revised rules and the Interim Operating Procedures for NC-RETS. Following receipt of comments, the Commission anticipates issuing final Operating Procedures for NC-RETS.

On August 3, 2010, the Commission issued an Order that (1) made preliminary decisions regarding the parties' proposed amendments to Rules R8-64 through R8-69; (2) proposed additional amendments to those Rules; (3) invited parties to comment on the proposed amendments and the NC-RETS Interim Operating Procedures; and (4) established that, beginning January 1, 2011, renewable energy facilities that participate in NC-RETS are only eligible for historic REC issuances for energy production going back two years.

On August 11, 2010, the Commission established September 20, 2010, as the deadline for filing comments. In its Order, the Commission affirmed that it

has already made preliminary decisions regarding numerous issues raised by the parties in their initial and reply comments and their suggested revisions. The Commission's intent in this further round of comments is to seek comment on the specific amendments proposed to implement these decisions, on issues addressed by the Commission but not raised originally by the parties, and on potential conflicts with the NC-RETS Interim Operating Procedures.

On September 20, 2010, the Commission issued an Order establishing October 4, 2010, as the new deadline for filing comments.

On October 4, 2010, comments in response to the Commission's August 3, 2010 Order were filed jointly by Virginia Electric and Power Company, d/b/a Dominion North Carolina Power (Dominion), Duke Energy Carolinas, LLC (Duke), GreenCo Solutions, Inc. (GreenCo), and Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc. (PEC), (the Utilities); jointly by Environmental Defense Fund, Southern Alliance for Clean Energy, and the Southern Environmental Law Center (the Environmental Intervenors); and jointly by ElectriCities of North Carolina, Inc. (ElectriCities), North Carolina Eastern Municipal Power Agency (NCEMPA), and North Carolina Municipal Power Agency Number 1 (NCMPA), (the Municipal Utilities). In addition, Duke submitted comments on behalf of itself, as did the Public Staff. On December 10, 2010, the Commission issued an Order extending until June 1, 2011, the deadline after which renewable energy facilities that participate in NC-RETS are only eligible for historic REC issuances for energy production going back two years.

Attached to this Order are: (1) Appendix A, the final revised Rules R8-64 through 69 with underlining and strikethroughs to highlight changes the Commission is making to the proposed rules it issued on August 3, 2010²; (2) Appendix B, the final revised Rules R8-64 through 69 without underlining and strikethroughs; (3) Appendix C, a form to assist facility owners in filing their renewable energy facility registrations pursuant to Rule R8-66; (4) Appendix D, the final NC-RETS Operating Procedures with underlining and strikethroughs to highlight changes the Commission is making to the Interim Operating Procedures that were issued by the Commission on July 1, 2010; and (5) Appendix E, the final NC-RETS Operating Procedures without underlining and strikethroughs. These rules and procedures are effective as of the date of this Order. The balance of this Order will discuss the issues raised by parties and the Commission's decisions relative to those issues.

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

Issue 1: Whether Renewable Energy Facilities Should Have An On-Going Obligation To Inform The Commission Regarding REC Sales

The Public Staff noted that the Commission proposed to amend Rule R8-64(b)(1)(x) to require both generators that apply for Certificates of Public Convenience and Necessity (CPCNs) and those that file reports of proposed construction pursuant to G.S. 62-110.1(g) to include in their submittals a general plan for the disposition of RECs created as a result of their generation, but that only CPCN holders must subsequently inform the Commission of any significant changes to the information they file in their submittal. The Public Staff suggested that generators that are exempt from the CPCN filing requirements should also be required to update the Commission of any material changes to their plans for the disposition of RECs or other environmental attributes.

The Commission disagrees. As explained in its August 3, 2010 Order, the Commission is requiring generators to initially include in their CPCN applications (or reports of proposed construction) their general plan, if known at the time, for the disposition of RECs in order to assist facility owners and utilities in identifying those facilities that also need to register as "renewable energy facilities" under Rule R8-66. The Commission does not consider a change in plans relative to selling RECs to be a "significant change" that needs to be filed with the Commission on an on-going basis. The Commission believes it would be burdensome to require all renewable energy facilities located in North Carolina to update the Commission when their plans for

² Throughout this Order, deletions from the August 3, 2010 Proposed Rules are shown by strikethrough, and additions are shown by underlining.

disposing of RECs change. The Commission will instead rely on NC-RETS to track REC issuance and REC transfers. In the event the data in NC-RETS is challenged, the Public Staff may exercise its right to audit the records of any renewable energy facility as provided for in the Commission's orders approving the facility registrations.

The Utilities opposed the Commission's revision to R8-64(b)(1)(x), arguing that the provision would require a generator to divulge confidential market information regarding the intended recipient of RECs or environmental attributes. They argued that other associated environmental attributes have no relevance to the registration of a renewable energy facility. The Utilities proposed revisions to clarify that the applicant would simply need to state whether they intend to produce RECs. The Commission did not intend to require applicants to divulge an intended REC recipient, and the Commission agrees that information regarding a facility's associated environmental attributes is not necessary. The Commission will, therefore, revise proposed Rule R8-64(b)(1)(x) as shown below and in Appendix A.

(x) The applicant's general plan for sale of the electricity to be generated, including the utility to which the applicant plans to sell the electricity; any provisions for wheeling of the electricity; arrangements for firm, non-firm or emergency generation; the service life of the project; and the applicant's general plan for the disposition of renewable energy certificates or other environmental attributes whether the applicant intends to produce renewable energy certificates that are eligible for compliance with the State's Renewable Energy and Energy Efficiency Portfolio Standard; and

Issue 2: Notification Of Significant Changes

The Utilities proposed amending Rule R8-64(d)(3), which addresses the ongoing obligations of a CPCN recipient, such that the certificate holder would be required to notify "both the Commission and the utility involved" of "significant changes" prospectively, even after the certified facility is built. The Utilities asserted this was needed "due to the relevance of these items on an entity's renewable energy status." The Commission believes this need for notification is already addressed by new Rule R8-66(h), which provides that an owner of a renewable energy facility shall notify the Commission and the tracking system that issues its RECs within 15 days of "any material change in status, including ownership change, fuel change, or permit issuance or revocation." This requirement should ensure that the RECs issued for the facility accurately reflect its renewable energy status. Therefore, the Commission will decline to adopt the Utilities' proposed amendment to Rule R8-64(d)(3).

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

Issue 3: Whether Small Generators That Participate In Utility Programs Should Be Subject To Rule R8-66

The Public Staff noted that the issue of whether small generators participating in utility programs should be subject to certain requirements of Rule R8-66 was pending before the Commission in PEC's Residential Service Experimental SunSense Solar Rider, Docket No. E-2, Sub 979. On November 15, 2010, the Commission issued an Order approving PEC's request to waive some of the registration and reporting requirements of Rule R8-66 for residential customers who participate in this rider. Since no party proposed rule revisions to waive these requirements for all residential customers, the Commission will not address that issue at this time.

<u>Issue 4: Whether Renewable Energy Facilities Must Inform The Commission When</u> <u>They Join Or Change REC Tracking Systems</u>

The Public Staff recommended that a new subsection be added to Rule R8-66(b)(1) that would require the owner of a renewable energy facility to advise the Commission when it has joined a tracking system (other than NC-RETS), and to advise the Commission any time the status of its tracking system participation changes. The Commission will decline to adopt the Public Staff's recommendation in this regard in order to minimize the on-going filing requirements for renewable energy facilities. In order for an electric power supplier to claim credit for a REC for REPS compliance, the REC must first be created in NC-RETS or another REC tracking system. Also, it is the Commission's understanding that each REC tracking system in the United States maintains rigorous records as to when generators begin and stop participation and require that all of a generator's RECs from a given time period be created in a single tracking system. Should REC tracking system records prove inadequate, the Public Staff may exercise its right to audit the records of any renewable energy facility as provided for in the Commission's orders approving their registrations.

Issue 5: Registration Form To Emphasize Map Requirement

The Public Staff requested that the application form for registering renewable energy facilities give more emphasis to the requirement to provide a map. The Commission agrees that this change will be helpful, and will, therefore, make the requirement to provide a map more explicit on the form for registering a renewable energy facility, as shown in Appendix C.

<u>Issue 6: Thermal Facilities To Include Information Regarding Method Of Measuring Or</u> <u>Estimating Energy Production</u>

The Public Staff recommended that Rule R8-66(b)(1) be amended to require facility owners to include with their registrations "the method used to determine the

BTUs generated if the facility creates thermal RECs." The Commission agrees that requiring this information as part of the registration process will help the Public Staff ascertain whether the applicant's intended methodology will produce accurate results. Therefore, the Commission will adopt the requirement, as shown in Appendix A.

Issue 7: Failure To Recertify

The Public Staff noted that it is not clear from the amended Rule R8-66(f) whether the failure of a renewable energy facility to annually recertify would automatically result in revocation of the facility's registration as a renewable energy facility. The Public Staff expressed concern about the lack of a centralized means of tracking facilities that fail to recertify. The Commission notes that NC-RETS will require participating facilities to recertify by April 1 each year. Failure to do so will result in the account holder being unable to access their accounts in NC-RETS.³ For owners of facilities that participate in a tracking system other than NC-RETS, annual recertification will remain a paper process. The Commission will publish on its web site the renewable energy facilities that have failed to timely recertify. Such facilities will not be able to transfer RECs into NC-RETS until their recertifications have been completed. Parties, including the Public Staff, who believe that a registration should be revoked, may petition the Commission.

Issue 8: Recovery Of Net Lost Revenues

The Environmental Intervenors stated that it would be helpful for the Commission to provide clear direction regarding the explicit limitations on the recovery of net lost revenues set forth in its June 15, 2009 Order Approving Agreement and Stipulation of Settlement, Subject to Certain Commission-Required Modifications, in PEC's Docket No. E-2, Sub 931, and its February 9, 2010 Order Approving Agreement and Joint Stipulation of Settlement Subject to Certain Commission-Required Modifications and Decisions on Contested Issues in Duke's Docket No. E-7, Sub 831. The Environmental Intervenors also stated that the Commission should consider a process to further expedite review of non-controversial demand-side management (DSM) and energy efficiency (EE) program applications. The Environmental Intervenors did not suggest specific rule revisions relative to either issue. In addition, both of these issues are new issues in the context of this rulemaking proceeding. Therefore, the Commission will decline to adopt the Environmental Intervenors' proposals at this time.

Issue 9: Form For Registering A Renewable Energy Facility

The Utilities suggested that the form entitled "Application to Register a Renewable Energy Facility or New Renewable Energy Facility" be revised to reflect that it could be used for either a report of proposed construction under Rule R8-65 or a registration request under Rule R8-66. The Utilities stated that the required information is identical, and hence the same form should suffice for both kinds of applications. The

³ See pages 35-36 of the NC-RETS Operating Procedures, Appendix E.

Commission has reviewed the filing requirements and finds that they are not, in fact, identical. For example, a report of proposed construction must include information relative to the projected cost of the facility, Rule R8-64(b)(viii), and a description of the facility's buildings, structures and equipment, Rule R8-64(b)(vi). Neither of these requirements applies to an application to register a renewable energy facility. In addition, there will be owners of facilities who are required to file a report of proposed construction but who do not intend to register the facility, and owners of out-of-state facilities who are not required to file a report of proposed construction but are simply registering the facility. The procedures for processing reports of proposed construction and registration statements differ, and it is important that owners of such facilities clearly identify which, or both, they are requesting. Therefore, the Commission will decline to adopt the Utilities' proposal.

Issue 10: Attestations Apply To Historic REC Production

The Utilities stated that the registration process does not make clear that the facility owner is attesting that the facility complied with all requirements for the historical period that it earned RECs. Rather, the form only applies to the immediate timeframe (and to future years via the recertification process). To ensure that the RECs produced in the past by a recently registered facility are eligible for compliance, the Utilities requested that Rule R8-66(b)(6) and the registration form be revised so that the owner of a renewable energy facility must attest that the information in the form "is true and correct for all years that the facility has earned RECs for compliance with G.S. 62-133.8." The Commission finds this to be a reasonable revision that will help maintain the credibility of RECs used for compliance. Therefore, the Commission will adopt the revision to Rule R8-66(b)(6) as shown in Appendix A and the registration form as shown in Appendix C.

<u>Issue 11: Owners Of Renewable Energy Facilities To Inform The Commission And The</u> <u>Tracking System Of Material Changes</u>

The Utilities noted the new requirement in Rule R8-66(h) for renewable energy facility owners to notify the Commission and the tracking system that issues the facility's RECs when material changes, such as a change in facility ownership, occur. The Utilities stated that facilities registered with the Commission "may not be simultaneously participating in a REC tracking system, and that one or both may require notification." The Utilities also noted that the 15-day requirement in the rule appears to conflict with a similar 30-day requirement in Section 4.4 of the NC-RETS Interim Operating Procedures. The Utilities proposed revisions to Rule R8-66(h) that appear to relieve a facility from communicating such changes to its REC registry if it participates in one other than NC-RETS.

The Commission notes that all of its orders approving registration of renewable energy facilities and new renewable energy facilities have included the requirement that each facility participate in a REC tracking system. In order to ensure that RECs are issued to the rightful owner, a facility's tracking system must be aware of facility ownership changes. In order to ensure RECs are issued with accurate fuel source identifiers, a facility's tracking system must be aware of fuel changes. In order for the Commission to "ensure that the owner and operator of each renewable energy facility that delivers electric power to an electric power supplier is in substantial compliance with all federal and state laws, regulations and rules for the protection of the environment and conservation of natural resources," G.S. 62-133.8(i)(5), the Commission must be informed if a registered facility has a permit issued or revoked. Therefore, it is consistent for the rules to require registered facilities to notify both entities, the Commission and their REC tracking system, of material changes. The Commission will, therefore, decline to adopt the changes proposed by the Utilities. However, the Commission will revise the NC-RETS Operating Procedures to be consistent with Rule R8-66(h) by requiring notifications of material changes to be made to NC-RETS within 15 days.

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

Issue 12: Energy Information Administration Customer Account Data Acceptable

The Utilities recommended that proposed amendments to Rule R8-67(a)(4) be reversed so as to retain an electric power supplier's ability to use the customer account data it reports to the Energy Information Administration for REPS purposes. The Commission believes this is a reasonable recommendation, and will therefore amend Rule R8-67(a)(4) as shown in Appendix A.

Issue 13: Definition Of Utility Compliance Aggregator

The Utilities suggested that the definition of "utility compliance aggregator" in Rule R8-67(a)(5) be amended to clarify that the role of a utility compliance aggregator is not limited to the two functions listed in the definition. The Commission finds this suggestion to be reasonable and will, therefore, amend the proposed definition as follows and as shown in Appendix A:

"Utility compliance aggregator" is an organization that assists an electric power supplier in demonstrating its compliance with REPS. Such demonstration may include, among other things, filing REPS compliance plans or reports and participating in NC-RETS on behalf of the electric power supplier or a group of electric power suppliers.

Issue 14: Reporting Of Annual Incremental Costs Incurred In REPS Compliance Reports

The Utilities suggested revisions to Rule R8-67(c)(1)(vi) so that electric power suppliers need only include annual "incremental costs incurred" in their REPS compliance reports on an exception basis, that is, only "to the extent that an electric power supplier does not meet the MWh [REC and EEC] compliance requirements. In

this case, it is important to document that cost caps were met in order to be deemed compliant." The Commission disagrees. One of the requirements of Senate Bill 3 is that the electric power supplier not incur and recover from customers incremental costs in excess of the per-account costs caps. Because the Commission does not regulate the rates for all electric power suppliers, the Commission needs this information in order to monitor compliance. Therefore, this information must be provided. It should be no burden for an electric public utility to provide this information since they will be providing substantially similar data to support their cost recovery riders. While the Commission will decline to adopt the specific language suggested by the Utilities, it will instead adopt the language below in order to clarify that the amount of incremental REPS spending during the compliance calendar year will be the measure for whether an electric power supplier is "deemed compliant" pursuant to G.S. 62-133.8(h)(3). Therefore, the Commission will revise proposed Rule R8-67(c)(1) as shown below and in Appendix A:

(iv) the actual total and incremental costs incurred <u>during the calendar</u> <u>year</u> to comply with G.S. 62-133.8(b), (c), (d), (e) and (f);

(v) a comparison of <u>the</u> actual <u>compliance</u> <u>incremental</u> costs <u>incurred</u> <u>during the calendar year to the per-account annual charges (in</u> <u>G.S. 62-133.8(g)(4)) applied to its total number of customer accounts as of</u> <u>December 31 of the previous calendar year</u> to the annual cost caps;

(vi) the status of compliance with the requirements of G.S. 62-133.8(b), (c), (d), (e) and (f). To the extent that compliance with the requirements of G.S. 62-133.8(b), (c), (d), (e) and (f) has not been achieved, the electric power supplier shall provide a comparison of the actual incremental costs incurred during the calendar year to the per-account annual charges (in G.S. 62-133.8(h)(4)) applied to its total number of customer accounts as of December 31 of the previous calendar year;

<u>Issue 15: Whether To Align Compliance Time Period With Cost Incurrence Time Period.</u> <u>And Whether REC Costs May Be Rolled Forward For Cost Recovery</u>

The Utilities stated that throughout Rule R8-67 compliance measurement and recovery periods are referenced by various and inconsistent terms: "calendar year," "annual," and "cost recovery period." They stated as follows:

It is not clear how each of these items interacts with regard to each other. ... By the term annual, one could infer either calendar year or cost recovery period. ... Since the ability to recover [costs] from customers is based on the cost recovery period, then it would seem appropriate for cost comparisons to the cap be for the same cost recovery period versus a calendar year. If it is not, then the electric suppliers would theoretically be forced to comply with two cost caps, one for the compliance report on an annual basis, and one for the cost recovery period to assess the amounts collected from customers. ... it is only logical for the compliance period

and the cost recovery period to coincide from a timing perspective. This change would eliminate confusion regarding the reconciliation of a calendar year compliance requirement and a cost cap related to compliance costs measured over a different period.

The Utilities proposed extensive revisions to Rule R8-67(c), the portion of the rules dealing with the REPS compliance report, in order to apply the cost cap against a compliance time period and a cost recovery time period that are consistent.

The Commission agrees with the Utilities that Senate Bill 3 applies the cost caps to multiple circumstances, and that those applications of the cost cap do not necessarily cover the same time period, nor do they measure the same activities. First, G.S. 62-133.8(h)(3) uses the cost cap to limit the incremental costs that may be incurred and then recovered by an electric power supplier:

...the total annual incremental cost to be incurred by an electric power supplier <u>and</u> recovered from the electric power supplier's retail customers shall not exceed an amount equal to the per-account annual charges set out in subdivision (4) of this subsection applied to the electric power supplier's total number of customer accounts determined as of 31 December of the previous calendar year. [Emphasis added.]

Similarly, G.S. 62-133.8(h)(4) applies the cost cap to limit the amount of an electric power supplier's annual cost recovery rider:

An electric power supplier shall be allowed to recover the incremental costs incurred to comply with the [REPS] requirements ... through an annual rider not to exceed the following per-account annual charges

Second, G.S. 62-133.8(h)(3) applies the cost cap to determine REPS compliance:

An electric power supplier shall be conclusively deemed to be in compliance with the [REPS] requirements ... if the electric power supplier's total annual incremental costs incurred equals an amount equal to the per-account annual charges set out in subdivision (4) of this subsection applied to the electric power supplier's total number of customer accounts determined as of 31 December of the previous calendar year.

Throughout G.S. 62-133.8, it is clear that the General Assembly intended that REPS compliance be based on a calendar year period. In stating the general REPS obligations for the electric power suppliers in subsections (b) and (c), and the set-aside requirements in subsections (d), (e) and (f), the REPS requirements were set forth on a calendar year basis. In subsection (h), the term "incremental costs" is defined primarily as the additional costs incurred for REPS compliance, and should be considered to be the incremental costs incurred during a calendar year for REPS compliance. Thus, the

Commission concludes that the use of the word "annual" in G.S. 62-133.8(h)(3) should be interpreted to mean "calendar year" consistent with the General Assembly's intent that REPS compliance and incremental costs should be determined on a calendar year basis.

If there were no risk that the electric power suppliers would meet the REPS percentage requirements without encroaching on the cost cap, this issue would be purely academic; the cost cap would never come into play and the time periods over which it is applied would be irrelevant. However, as there is the risk that an electric power supplier might reach the cost cap at some time in the future, further analysis of the statutory language and clarification of the Commission's interpretation is necessary.

In adopting rules to implement Senate Bill 3, the Commission recognized that it is unlikely, if not impossible, for an electric power supplier to limit its spending on power generated from renewable energy resources during a calendar year when at least a portion of its requirements is being met by purchases from facilities that rely on intermittent resources, such as the sun and wind. The General Assembly made allowances for this variability by allowing electric power suppliers to carry forward to the next calendar year RECs purchased in a calendar year in excess of those needed for that year's REPS compliance. For example, during calendar year 2008 there was no REPS obligation, and at the end of that year, all RECs that had been purchased were carried forward to 2009. Likewise, during calendar year 2009, during which there was also no REPS obligation, all RECs previously carried forward from 2008 as well as any purchased during 2009 were carried forward to 2010. Thus, since there was no REPS requirement in 2009, all RECs owned at the end of that calendar year were carried forward and available to be applied toward the REPS requirement in 2010.

Rule R8-67(e)(10), as originally adopted, was intended to allow an electric public utility to defer cost recovery for any incremental costs in excess of the cost cap and to carry forward the associated RECs. However, cost recovery could not be deferred for any RECs that were retired for compliance with the prior year's REPS requirement. For example, if a utility with an incremental cost cap of \$1 million was delivered, pursuant to contract, RECs costing in excess of \$1 million, it could claim compliance pursuant to subsection (h)(3) with regard to the incremental costs in excess of \$1 million. The RECs associated with the incremental costs in excess of \$1 million could be carried forward to the next calendar year and recovery of those incremental costs would be deferred. In fact, an electric public utility would be allowed to carry forward such RECs indefinitely as long as it continued to defer recovery of the associated incremental costs.

The suggested revisions by the Utilities attempt to align the timeframes so that the annual charges to customers and the annual costs incurred toward REPS compliance are measured during the same timeframe. However, the Commission believes it is the clear intent of Senate Bill 3 to have essentially two cost caps: one to limit REPS charges to customers, and one to create an alternate path toward REPS compliance via a spending cap. Therefore, the Commission will decline to adopt the revisions suggested by the Utilities for Rule R8-67(c). However, the Commission acknowledges that there is some confusion because cost-recovery periods for electric public utilities do not perfectly align with calendar years. The Commission will, therefore, revise proposed Rule R8-67(e)(10) as shown below and in Appendix A such that the annual cost caps for charges to customers specified in G.S. 62-133.8(h)(4) apply to customer charges for any "12-month recovery period."

The Utilities requested that the Commission clarify the intent of Rule R8-67(e)(10) relative to cost recovery. They noted that cost recovery filings routinely include a forecast period allowing recovery of future RECs that in most cases have not been produced as of the time of the cost recovery proceeding. Additionally, under the current rule, it "could be construed that the cost of a REC cannot be recovered after the REC has been used for compliance...." The Utilities also stated that, NC-RETS stakeholder meetings. differences interpretation durina in of G.S. 62-133.8(h)(3) had surfaced, and requested that the Commission clarify that REPS costs may be "carried forward to a subsequent year subject to the application of the cost caps."

The Utilities are correct that Rule R8-67(e)(10) is confusing and appears to be at cross-purposes with the use of an experience modification factor (EMF) in REPS rider proceedings. Additionally, the Utilities are correct that the Commission intended that costs for RECs that are being banked for compliance in a future year <u>may</u> be rolled forward into another cost recovery year if recovery in the year in which the costs are incurred would cause the electric power supplier to exceed its cost cap. Therefore, the Commission will clarify Rule R8-67(e)(10) as shown below and in Appendix A:

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

Issue 16: Data Retention

The Utilities recommended that data from electric meters installed on the customer's side of a utility meter, or customer-measured or metered thermal data, be subject to the same 10-year record retention requirements as the electric generation data from meters read by electric power suppliers. The Commission agrees, and will, therefore, adopt the Utilities' recommendation to amend proposed Rules R8-67(g)(3) and (4), as shown in Appendix A. (The amendment to Rule R8-67(g)(4) is also shown in the discussion of Issue 17.)

Issue 17: Measurement Of Thermal Energy Production

The Utilities noted the revised Rule R8-67(g)(4), and stated that the requirement to "explicitly address thermal energy flows as well as heat transfers" is not clear to them. The Commission will, therefore, eliminate the confusing language but notes that owners of thermal facilities will be required to explain their plans for metering or estimating a facility's thermal energy output when they register a thermal facility as a renewable energy facility. Utilities also requested that the rule be clarified to recognize that it is acceptable for meters not to be installed on thermal facilities. The Commission agrees that it is acceptable for thermal energy facilities to use "other industry-accepted means" to estimate a thermal facility's output, and will, therefore, adopt the proposed revision. The Commission will amend proposed Rule R8-67(g)(4) as shown below and in Appendix A:

Thermal energy produced by a combined heat and power system (4) or solar thermal energy facility shall be the thermal energy recovered and used for useful purposes other than electric power production. The useful thermal energy may be measured by meter, or if that is not practicable, by other industry-accepted means that show what measurable amount of useful thermal energy the system or facility is designed and operated to produce and use. Renewable energy certificates shall be earned based on one certificate for every 3,412,000 British thermal units (Btu) of useful thermal energy produced. Meter devices, if used, Btu meters shall be located so as to measure the actual thermal energy consumed by the load served by the facility. Thermal energy output that is used as station power or to process the facility's fuel is not eligible for RECs. Thermal energy production, whether based on engineering estimates or Btu metering, shall explicitly address thermal energy flows as well as heat energy transfers. Thermal energy production data, whether metered or estimated, shall be retained for audit for ten years.

Issue 18: Participation In REC Tracking System

The Utilities recommended a clarification to proposed Rule R8-67(h)(4) such that a registered renewable energy facility does not have to participate in a REC tracking system unless it wants to have RECs issued or it wants to transfer RECs into NC-RETS. The Commission believes it is acceptable for the owner of a registered renewable energy facility to decide to forego participation in the REC market. However, the facility must be registered in NC-RETS or another REC tracking system in order for RECs associated with its renewable energy production to be claimed by an electric power supplier for REPS compliance. Therefore, the Commission will adopt the Utilities' proposal, with slight revisions, as shown below and in Appendix A:

(4) Each renewable energy facility or new renewable energy facility registered by the Commission under Rule R8-66 shall participate in NC-RETS in order to have RECs issued, or in another REC tracking system in order to have RECs issued and transferred into NC-RETS, but by no means shall a facility's meter data for the same time period shall be used for simultaneous REC issuance in two such systems

Issue 19: Historic REC Issuance Limited To Two Years

The Commission's August 3, 2010 Order required that, "beginning January 1, 2011, renewable energy facilities that participate in NC-RETS are only eligible for historic REC issuance for energy production going back two years." Similarly, the Commission proposed to include the same requirement in Rule R8-67(h)(4):

Beginning January 1, 2011, renewable energy facilities registered in NC-RETS may only enter historic energy production data for REC issuance that goes back up to two years from the current date.

The Utilities opposed this decision and proposed rule, with the Utilities asserting that:

[L]imiting meter data uploads to the prior two years precludes an electric [power] supplier from purchasing RECs from a renewable energy facility over the full three year "life" of a REC as provided in R8-67(d)(1). In fact, the NC-RETS limitation on historical uploads renders eligible RECs between two and three years old ineligible.

Similarly, the Municipal Utilities stated that:

Proposed Rule R8-67(h)(4) in its current form arguably would make ineligible RECs purchased by an electric power supplier in 2011 that are of a 2008 vintage if the energy production data associated with the 2008 vintage RECs had not already been entered into NC-RETS by January 1, 2011. If the proposed new rule ... is not modified ... to be consistent with existing Rule R8-67(d)(1), the Commission is in effect amending a rule that electric power suppliers have heretofore relied on since February 29, 2008, when entering into their REC purchase agreements (many of which are undoubtedly for more than 5 year terms), and thereby creating commercial problems for the electric power suppliers because of uncertainty as to the Commission's rules. G.S. 62-133.8(a)(6) defines a renewable energy certificate, or REC, as:

[A] <u>tradable instrument</u> that is equal to one megawatt hour of electricity or equivalent energy supplied by a renewable energy facility, new renewable energy facility, or reduced by implementation of an energy efficiency measure <u>that is used to track and verify compliance</u> with the requirements of this section as determined by the Commission. A 'renewable energy certificate' does not include the related emission reductions [Emphasis added.]

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

Renewable energy certificates (whether or not bundled with electric power) claimed by an electric power supplier to comply with G.S. 62-133.8(b), (c), (d), (e) and (f) must have been earned after January 1, 2008; <u>must have been purchased by the electric power supplier within three years of the date they were earned;</u> shall be retired when used for compliance; and shall not be used for any other purpose. [Emphasis added.]

The Commission disagrees that proposed Rule R8-67(h)(4) precludes electric power suppliers from buying RECs that are associated with qualifying energy that was produced up to three years in the past, and there is no conflict between the two provisions, as asserted by the Utilities and the Municipal Utilities. Rather, the new provision requires renewable energy facilities to establish accounts in NC-RETS or another REC tracking system and convert their qualifying energy production into RECs in a timely manner. The deadline adopted by the Commission, with two years of energy production, is consistent with similar deadlines adopted by other registries. This two-year deadline will help ensure the credibility of RECs created in NC-RETS by assuring an accurate audit trail is created before the underlying energy production data is lost or becomes stale. As time passes, it becomes more difficult to accurately address any errors and inconsistencies in energy production data. This is especially true for (1) facilities that use multiple fuels, with the amount of each fuel and the energy content of each fuel type varying from month-to-month; (2) facilities that are allowed to self-report their energy production; and (3) facilities that are allowed to estimate their energy production. In addition, meter malfunctions sometimes cause production data to be inaccurate; sorting out such inaccuracies is more difficult with the passage of time, and accuracy is essential to assure that the correct number of RECs is issued into a facility owner's NC-RETS account.

The Commission is aware of at least one situation in which RECs that had not been issued by a registry were sold to a third party, and that third party requested to have them admitted into NC-RETS. There would be no need to address such issues if each renewable energy facility that secures a registration order from the Commission took the next step, as required in that registration order, and began participating in a REC registry so that RECs could be issued by a tracking system as quickly as possible. Similarly, the Commission is aware of renewable energy facilities, having been issued a registration order by the Commission, being sold to a new owner without the first owner ever establishing an NC-RETS account and pursuing the issuance of RECs for their qualifying renewable energy production. Such scenarios raise issues that can easily be avoided.

As stated in its August 3, 2010 Order:

The Commission believes that its rules should encourage the issuance of RECs in a tracking system as soon as possible following the production of the energy associated with the RECs. The Commission agrees with the Public Staff that renewable energy facilities should register promptly and record their meter data for REC issuance in NC-RETs (or another registry) without delay. This will enhance the integrity of RECs issued by NC-RETS and ease the Public Staff's auditing responsibilities.

Owners of renewable energy facilities that have been registered with the Commission but have not yet joined a registry are reminded that their order from the Commission approving their facility's registration required them to join a registry for the issuance of RECs.⁴

The Commission is aware that some renewable energy facilities experienced delays in receiving their registration orders from the Commission, and those orders are a prerequisite to having RECs issued in NC-RETS. To allow additional time for all facilities to register and report historical production data, by Order dated December 10, 2010, the Commission established a new deadline of June 1, 2011, that applies to renewable energy facilities and new renewable energy facilities that participate (or intend to participate) in NC-RETS for the purpose of having RECs issued. Until that date, such facilities may have "historic" RECs issued for energy production going back as far as January 1, 2008. But starting on June 1, 2011, such facilities may have RECs issued for only two years' worth of historic energy production data.

Issue 20: RECs Must Reside In NC-RETS

The Municipal Utilities proposed modifying Rules R8-67(d)(4) and (h)(2) because "they condition the methods of complying with [Senate Bill 3] on whether or not an out-of-State renewable energy certificate tracking system allows RECs on such system to be imported into NC-RETS."

Proposed Rule R8-67(d)(4) states:

Renewable energy certificates must be issued by, or imported into, the renewable energy certificate tracking system established in Rule R8-67(h)

⁴ If the owner of such a facility, after having received a registration order from the Commission, decides not to pursue the issuance of RECs for sale to a North Carolina electric power supplier pursuant to Senate Bill 3, there would be no need for their facility to participate in a REC registry.

in order to be eligible RECs under G.S. 62-133.8.(b)(2)e or G.S. 62-133.8(c)(2)d.

Similarly, proposed Rule R8-67(h)(2) states:

A renewable energy certificate (REC) tracking system, to be known as NC-RETS, is established by the Commission. NC-RETS shall issue, track, transfer and retire RECs. It shall calculate each electric power supplier's REPS obligation and report each electric power supplier's REPS accomplishments, consistent with the compliance report filed under Rule R8-67(c). NC-RETS shall be administered by a third-party vendor selected by the Commission. Only RECs issued by or imported into NC-RETS are qualifying RECs under G.S. 62-133.8.

The Municipal Utilities are correct that the Commission's rules, as well as the Memorandum of Agreement (MOA) it negotiated with the NC-RETS Administrator, contemplate all RECs used for REPS compliance residing in NC-RETS, and eventually being retired in an NC-RETS retirement sub-account. The Request for Proposals (RFP) that the Commission issued for NC-RETS in Docket No. E-100, Sub 121 required the selected vendor to develop a system that could accommodate REC imports from other tracking systems. NC-RETS can currently accommodate REC imports from three tracking system: the North American Renewables Registry (NAR), the Midwest Renewable Energy Tracking System (M-RETS), and the Western Renewable Energy Generation Information System (WREGIS). The NC-RETS Administrator is continuing to work with other registries to ultimately accommodate transfers between NC-RETS and each of them. The Commission is aware that some electric power suppliers have contracted for RECs that have been issued in the Electric Reliability Council of Texas (ERCOT) tracking system, and that the ERCOT tracking system software did not anticipate exports to other tracking systems. Nonetheless, the NC-RETS Administrator has developed a protocol that will allow the NC-RETS Administrator to facilitate retiring RECs in ERCOT and re-issuing them in NC-RETS. If any electric power supplier owns RECs or is contemplating purchasing RECs in any registries besides NAR, M-RETS, WREGIS or ERCOT, they should communicate that need to the NC-RETS Administrator. While it might become necessary for the Commission to allow exceptions, via waivers, to the requirement that all RECs be either issued in or imported into NC-RETS, the Commission prefers to hold the NC-RETS Administrator accountable for meeting its obligations under the MOA. Therefore, the Commission will decline to adopt the revisions proposed by the Municipal Utilities.

The Commission notes that, as drafted, Rule R8-67(d)(4) would apply only to unbundled RECs, that is, RECs purchased separately from the associated energy. Since that is not the Commission's intent, the Commission will therefore amend Rule R8-67(d)(4) as follows and as shown in Appendix A:

Renewable energy certificates must be issued by, or imported into, the renewable energy certificate tracking system established in Rule R8-67(h)

in order to be eligible RECs under G.S. 62-133.8.(b)(2)e or G.S. 62-133.8(c)(2)d.

Issue 21: Deadline For Providing Previous Year's Retail Sales Data

The Municipal Utilities proposed that Rule R8-67(h)(11) be modified "to require an electric power supplier to provide its previous years retail sales by June 1st of each year rather than May 1st." They stated that the power agencies receive this information on or about April 30 each year and need additional time to review, confirm and input the information into NC-RETS. The Commission believes this is a reasonable request, and will therefore, amend Rule R8-67(h)(11) as suggested by the Municipal Utilities. Because the retail sales information is used by the NC-RETS Administrator to calculate its electric power supplier billings, it is also necessary to move back by one month the annual adjustment to those billings. The Commission, will therefore, amend Rule R8-67(h)(11) as show below and in Appendix A.

All Commission-approved costs of developing and operating NC-RETS shall be allocated among all electric power suppliers based upon their respective share of the total megawatt-hours of retail electricity sales in North Carolina in the previous calendar year. Each electric power supplier, or its utility compliance aggregator, shall, within 60 days of NC-RETS beginning operations, and by May June 1 of each subsequent year, enter its previous year's retail electricity sales into NC-RETS, which sales will be used by NC-RETS to calculate each electric power supplier's REPS obligations and NC-RETS charges. NC-RETS shall update its billings beginning each June July based on retail sales data for the previous calendar year. Such NC-RETS charges shall be deemed to be costs that are reasonable, prudent, incremental, and eligible for recovery through each electric public utility's annual rider established pursuant to G.S. 62-133.8(h).

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

Issue 22: Market Growth For Duration Of Program

The Utilities recommended amending Rule R8-68(c)(2)(iii)b, part of the filing requirements for a new EE or DSM program, as shown below:

(iii) Additionally, an electric public utility shall include or describe:

(b) the total market potential and estimated market growth throughout the life of the measure duration of the program;

The Commission finds this amendment to be helpful because potential and estimated market growth "throughout the duration of the program" is more meaningful for planning purposes, than the potential and estimated market growth "throughout the life of the measure," and will therefore adopt it as show in Appendix A.

Issue 23: Measurement And Verification (M&V) Information

The Utilities recommended deleting Rule R8-68(c)(2)(iii)g because it is redundant with a similar provision in Rule R8-68(c)(3)(ii)a. Both provisions require electric public utilities to include measurement and verification information with their EE or DSM program applications, and the Commission agrees that it is appropriate to delete one of them, Rule R8-68(c)(2)(iii)g as suggested by the Utilities. The Commission will also revise the remaining provision, as shown below and in Appendix A, to make clear that the M&V requirements apply to both energy and peak demand savings:

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

Issue 24: Measurement And Verification Of EE And DSM Programs

In addition to the comments filed jointly with the Utilities, Duke filed comments individually on an issue related to M&V for EE and DSM programs. Specifically, Duke proposed the following revisions to Rule R8-68(c)(3)(ii):

(ii) Measurement and Verification Reporting Plan for New Demand-Side Management and Energy Efficiency Measures. — The electric public utility shall be responsible for the measurement and verification of energy and peak demand savings and may use the services of an independent third party for such purposes. The costs of implementing the measurement and verification process may be considered as operating costs for purposes of Commission Rule R8-69. In addition, the electric public utility shall:

d. identify any third party and include all an <u>estimate</u> of the costs of that third party, <u>attributable to the</u> <u>specific program or related portfolio of programs</u>, if the electric public utility plans to utilize an independent third party for purposes of measurement and verification.

Duke argued that the Commission's proposed modification to Rule R8-68 would place compliance requirements on utilities that are inconsistent with the standard practices of the M&V process. Duke stated:

Quite simply, the Company does not generally have individualized M&V costs that are identifiable with any single new measure or program. Duke Energy Carolinas' M&V plan operates on a portfolio basis, so to report on costs of M&V for a single new measure may be overstating actual M&V costs for that measure, as such M&V costs are managed at the portfolio level. In the filings Duke...has made to date...the company has estimated its M&V costs associated with the particular program based on a general percentage of the program's costs.

Duke's proposed amendment and the related rationale raise issues that are beyond the scope of this proceeding. The Commission believes Duke's concern is best addressed in the context of a Duke-specific proceeding rather than in this rulemaking docket. Therefore, the Commission will decline to adopt Duke's proposed amendments to Rule R8-68(c)(3)(ii)d.

The Commission notes that on August 24, 2010, it issued an Order Requesting Comments On Measurement And Verification Of Reduced Energy Consumption. In November of 2010 it received responsive comments, and its order is pending. It is possible the Commission will further amend its M&V rules in that order.

NC-RETS Operating Procedures

The Public Staff stated that it is not aware of any conflicts or inconsistencies between the NC-RETS Interim Operating Procedures and the revised Rules R8-64 through R8-69. Duke submitted two minor corrections to the NC-RETS Interim Operating Procedures, which the Commission will adopt in the final NC-RETS Operating Procedures. In addition, Commission Staff and the NC-RETS Administrator suggested minor revisions to conform the NC-RETS Operating Procedures with changes that have been made to NC-RETS, such as the addition of several fuel types and registries from which RECs can be imported into NC-RETS. As discussed previously, the Commission will revise the NC-RETS Operating Procedures to be consistent with Rule R8-66(h) by requiring owners of renewable energy facilities to communicate material changes to the Commission and NC-RETS within 15 days. The Commission will adopt the NC-RETS Operating Procedures as shown in Appendix D and Appendix E.

IT IS, THEREFORE, ORDERED as follows:

1. The revised Rules R8-64 through R8-69, as shown in Appendix A and Appendix B, are approved.

2. The revised NC-RETS Operating Procedures, as shown in Appendix D and Appendix E, are approved.

3. The Commission will publish on its website Appendix C, a form to assist the owners of renewable energy facilities in filing their renewable energy facility registrations pursuant to Rule R8-66.

ISSUED BY ORDER OF THE COMMISSION.

This the $_31^{st}$ day of January, 2011.

NORTH CAROLINA UTILITIES COMMISSION

Hail L. Mount

Gail L. Mount, Deputy Clerk

kj123111.01

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

(a) Scope of Rule.

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

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

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

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

(b) The Application.

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

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

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

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

(iv) The location of the generating facility set forth in terms of local highways, streets, rivers, streams, or other generally known local landmarks together with a map, such as a county road map, with the location indicated on the map; (v) The ownership of the site and, if the owner is other than the applicant, the applicant's interest in the site;

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

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

(viii) The projected cost of the facility;

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

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

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

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

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

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

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

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

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

(vi) An economic feasibility study of the project;

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

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

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

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

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

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

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

(6) The application and 15 copies shall be filed with the Chief Clerk of the Utilities Commission.

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

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

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

(3) If a complaint is received within 10 days after the last date of the publication of the notice, the Commission will schedule a public hearing to determine whether a certificate should be awarded and will give reasonable notice of the time and place of the hearing to the applicant and to each

complaining party and will require the applicant to publish notice of the hearing in the newspaper in which the notice of the application was published. If no complaint is received within the time specified, the Commission may, upon its own initiative, order and schedule a hearing to determine whether a certificate should be awarded and, if the Commission orders a hearing upon its own initiative, it will require notice of the hearing to be published by the applicant in the newspaper in which the notice of the application was published.

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

(d) The Certificate.

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

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

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

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

Rule R8-65. REPORT BY PERSONS CONSTRUCTING ELECTRIC GENERATING FACILITIES EXEMPT FROM CERTIFICATION REQUIREMENT

(a) All persons exempt from certification under G.S. 62-110.1(g) shall file with the Commission a report of the proposed construction of an electric generating facility before beginning construction of the facility. The report of proposed construction shall include the information prescribed in subsection (b)(1) of Rule R8-64 and shall be signed and verified by the owner of the electric generating facility or by an individual duly authorized to act on behalf of the owner for the purpose of the filing.

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

(c) The owner of the electric generating facility shall provide a copy of the report of proposed construction to the electric public utility, electric membership corporation, or municipality to which the generating facility will be interconnected.

(d) The owner of the electric generating facility shall file an original and 15 copies of the report of proposed construction with the Chief Clerk of the Utilities Commission. No filing fee is required.

(e) Upon the filing of a report of proposed construction, the Chief Clerk will assign a new docket or sub-docket number to the filing and will deliver 2 copies of the report of proposed construction to the Clearinghouse Coordinator of the Office of Policy and Planning of the Department of Administration for distribution by the Coordinator to State agencies having an interest for information only.

(f) The Commission may order a hearing on the report of proposed construction upon its own motion or upon receipt of a complaint specifying the basis thereof. Otherwise, no acknowledgment of receipt of the report of proposed construction will be issued nor will any other further action be taken by the Commission.

Rule R8-66. REGISTRATION OF RENEWABLE ENERGY FACILITIES; ANNUAL REPORTING REQUIREMENTS

(a) The following terms shall be defined as provided in G.S. 62-133.8: "electric power supplier"; "renewable energy certificate"; and "renewable energy facility."

(b) The owner, including an electric power supplier, of each renewable energy facility, whether or not required to obtain a certificate of public convenience and necessity pursuant to G.S. 62-110.1, that intends for renewable energy certificates it earns to be eligible for use by an electric power supplier to comply with G.S. 62-133.8 shall register the facility with the Commission. The registration statement may be filed separately or together with an application for a certificate of public convenience and necessity, or with a report of proposed construction by a person exempt from the certification requirement. All relevant renewable energy facilities shall be registered prior to their having RECs issued in the North Carolina Renewable Energy Tracking System (NC-RETS) pursuant to Rule R8-67(h). Contracts for power supplied by an agency of the federal government are exempt from the requirement to register and file annually with the Commission if the renewable energy certificates associated with the power are bundled with the power purchased by the electric power supplier.

(1) The owner of each renewable energy facility that has not previously done so, including a facility that is located outside of the State of North Carolina, shall include in its registration statement the following information:

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

(ii) A statement of whether the facility owner is an individual, a partnership, or a corporation and, if a partnership, the name and business address of each general partner and, if a corporation, the state and date of incorporation and the name, business telephone number, electronic mailing address, and business address, of an individual duly authorized to

act as corporate agent for the purpose of the application and, if a foreign corporation, whether domesticated in North Carolina;

(iii) The nature of the renewable energy facility, including its technology, the type and source of its power or fuel(s); whether it produces electricity, useful thermal energy, or both; and the facility's projected dependable capacity in megawatts AC and/or British thermal units, as well as its maximum nameplate capacity;

(iv) The location of the facility set forth in terms of local highways, streets, rivers, streams, or other generally known local landmarks together with a map, such as a county road map, with the location indicated on the map;

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

(vi) A complete list of all federal and state licenses, permits, and exemptions required for construction and operation of the facility, and a statement of whether each has been obtained or applied for. A copy of those that have been obtained should be filed with the application. Wind facilities with multiple turbines, where each turbine is licensed separately, may provide copies of such approvals for one such turbine of each type in the facility, but shall attest that approvals for all of the turbines are available for inspection;

(vii) The date the facility began operating. If the facility is not yet operating, the owner shall provide the facility's projected in-service date;

(viii) If the facility is already operating, the owner shall provide information regarding the amount of energy produced by the facility, net of station use, for the most recent 12-month or calendar-year period. Energy production data for a shorter time period is acceptable for facilities that have not yet operated for a full year;

(ix) The name of the entity that does (or will) read the facility's energy production meter(s) for the purpose of renewable energy certificate issuance; and

(x) Whether the facility participates in a REC tracking system, and if so, which one. If the facility does not currently participate in a REC tracking system, which tracking system the owner anticipates will be used for the purpose of REC issuance.

(2) The owner of each renewable energy facility shall certify in its registration statement and annually thereafter that it is in substantial compliance with all federal and state laws, regulations, and rules for the protection of the environment and conservation of natural resources. If a credible showing is made that the facility is not in substantial compliance with all federal and state laws, regulations, and rules for the protection of the environment and conservation of natural resources. If a credible showing is made that the facility is not in substantial compliance with all federal and state laws, regulations, and rules for the protection of the environment and conservation of natural resources, the Commission shall refer the matter to the appropriate environmental agency for review. Registration shall not be revoked unless and

until the appropriate environmental agency concludes that the facility is out of compliance and the Commission issues an order revoking the registration.

(3) The owner of each renewable energy facility shall certify in its registration statement and annually thereafter that the facility satisfies the requirements of G.S. 62-133.8(a)(5) or (7) as a renewable energy facility or new renewable energy facility, that the facility will be operated as a renewable energy facility or new renewable energy facility, and, if the facility has been placed into service, the date when it was placed into service.

(4) The owner of each renewable energy facility shall further certify in its registration statement and annually thereafter that any renewable energy certificates (whether or not bundled with electric power) sold to an electric power supplier to comply with G.S. 62-133.8 have not, and will not, be remarketed or otherwise resold for any other purpose, including another renewable energy portfolio standard or voluntary purchase of renewable energy certificates in North Carolina (such as NC GreenPower) or any other state or country, and that the electric power associated with the certificates will not be offered or sold with any representation that the power is bundled with renewable energy certificates.

(5) The owner of each renewable energy facility shall certify in its registration statement and annually thereafter that it consents to the auditing of its books and records by the Public Staff insofar as those records relate to transactions with North Carolina electric power suppliers, and agrees to provide the Public Staff and the Commission access to its books and records, wherever they are located, and to the facility.

(6) <u>If the facility is already operating, the owner shall attest that the</u> registration information is true and accurate for all years that the facility has earned RECs for compliance with G.S. 62-133.8. Each registration statement shall be signed and verified by the owner of the renewable energy facility or by an individual duly authorized to act on behalf of the owner for the purpose of the filing.

(7) Renewable energy facilities and new renewable energy facilities that have RECs issued in NC-RETS shall provide their annual certification electronically via NC-RETS. Annual certifications are due April 1 each year.

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

(9) An original and 15 copies of the registration statement shall be filed with the Chief Clerk of the Utilities Commission. No filing fee is required to be submitted with the registration statement.

(c) Each re-seller of renewable energy certificates derived from a renewable energy facility, including a facility that is located outside of the State of North Carolina, shall ensure that the owner of the renewable energy facility registers with the Commission prior to the sale of the certificates by the re-seller to an electric power supplier to comply with G.S. 62-133.8(b), (c), (d), (e) and (f), except that the filing requirements in subsection (b) of this Rule shall apply only to information for the year(s) corresponding to the year(s) in which the certificates to be sold were earned.

(d) Upon receipt of a registration statement, the Chief Clerk will assign a new docket or sub-docket number to the filing. The Chief Clerk will deliver 2 copies of the registration statement to the Clearinghouse Coordinator of the Office of Policy and Planning of the Department of Administration for distribution by the Coordinator to State agencies having an interest in the filing for information only.

(e) No later than ten (10) business days after the registration statement is filed with the Commission, the Public Staff shall, and any other interested persons may, file with the Commission and serve upon the registrant a recommendation regarding whether the registration statement is complete and identifying any deficiencies. If the Commission determines that the registration statement is not complete, the owner of the renewable energy facility will be required to file the missing information. Upon receipt of all required information, the Commission will promptly issue an order accepting the registration, or setting the matter for hearing.

(f) Any of the following actions may result in revocation of registration by the Commission:

(1) Falsification of or failure to disclose any required information in the registration statement or annual filing;

(2) Failure to remain in substantial compliance with all federal and state laws, regulations, and rules for the protection of the environment and conservation of natural resources;

(3) Remarketing or reselling any renewable energy certificate (whether or not bundled with electric power) after it has been sold to an electric power supplier or any other person for compliance with G.S. 62-133.8 or for any other purpose, including another renewable energy portfolio standard or voluntary purchase of renewable energy certificates in North Carolina or any other state or country, or offering or selling the electric power associated with the certificates with any representation that the power is bundled with renewable energy certificates;

(4) Failure to allow the Commission or the Public Staff access to its books and records necessary to audit REPS compliance; or

(5) Failure to provide the annual certifications required by Rule R8-66(b).

(g) NC-RETS shall maintain on its website a list of all registration statement revocations.

(h) An owner of a renewable energy facility that has registered with the Commission shall notify the Commission and the tracking system that issues the facility's RECs within fifteen (15) days of any material change in status, including ownership change, fuel change, or permit issuance or revocation. An owner of a renewable energy facility shall also notify the Commission if it wants to withdraw its registration.

Rule R8-67. RENEWABLE ENERGY AND ENERGY EFFICIENCY PORTFOLIO STANDARD (REPS)

(a) Definitions.

(1) The following terms shall be defined as provided in G.S. 62-133.8: "Combined heat and power system"; "demand-side management"; "electric power supplier"; "new renewable energy facility"; "renewable energy certificate"; "renewable energy facility"; "renewable energy resource"; and "incremental costs."

(2) For purposes of determining an electric power supplier's avoided costs, "avoided cost rates" mean an electric power supplier's most recently approved or established avoided cost rates in this state, as of the date the contract is executed, for purchases of electricity from qualifying facilities pursuant to Section 210 of the Public Utility Regulatory Policies Act of 1978. If the Commission has approved an avoided cost rate for the electric power supplier for the year when the contract is executed, applicable to contracts of the same nature and duration as the contract between the electric power supplier and the seller, that rate shall be used as the avoided cost. Therefore, for example, for a contract by an electric public utility with a term of 15 years, the avoided cost rate applicable to that contract would be the comparable, Commission-approved, 15-year, long-term, levelized rate in effect at the time the contract was executed. In all other cases, the avoided cost shall be a good faith estimate of the electric power supplier's avoided cost, levelized over the duration of the contract, determined as of the date the contract is executed, taking into consideration the avoided cost rates then in effect as established by the Commission. In any event, when found by the Commission to be appropriate and in the public interest, a good faith estimate of an electric public utility's avoided cost, levelized over the duration of the contract, determined as of the date the contract is executed, may be used in a particular REPS cost recovery proceeding. Determinations of avoided costs, including estimates thereof, shall be subject to continuing Commission oversight and, if necessary, modification should circumstances so require.

(3) "Energy efficiency measure" means an equipment, physical, or program change that when implemented results in less use of energy to perform the same function or provide the same level of service. "Energy efficiency measure" does not include demand-side management. It includes energy produced from a combined heat and power system that uses nonrenewable resources to the extent the system:

(i) Uses waste heat to produce electricity or useful, measurable thermal or mechanical energy at a retail electric customer's facility; and

(ii) Results in less energy used to perform the same function or provide the same level of service at a retail electric customer's facility.

(4) "Year-end number of customer accounts" means the number of accounts within each customer class as of December 31 for a given calendar

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

(5) "Utility compliance aggregator" is an organization that assists an electric power supplier in demonstrating its compliance with REPS. Such demonstration may include, among other things, filing REPS compliance plans or reports and participating in NC-RETS on behalf of the electric power supplier or a group of electric power suppliers.

(b) REPS compliance plan.

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

(i) a specific description of the electric power supplier's planned actions to comply with G.S. 62-133.8(b), (c), (d), (e) and (f) for each year;

(ii) a list of executed contracts to purchase renewable energy certificates (whether or not bundled with electric power), including type of renewable energy resource, expected MWh, and contract duration;

(iii) a list of planned or implemented energy efficiency measures, including a brief description of the measure and projected impacts;

(iv) the projected North Carolina retail sales and year-end number of customer accounts by customer class for each year;

(v) the current and projected avoided cost rates for each year;

(vi) the projected total and incremental costs anticipated to implement the compliance plan for each year;

(vii) a comparison of projected costs to the annual cost caps for each year;

(viii) for electric public utilities, an estimate of the amount of the REPS rider and the impact on the cost of fuel and fuel-related costs rider necessary to fully recover the projected costs; and

(ix) to the extent not already filed with the Commission, the electric power supplier shall, on or before September 1 of each year, file a renewable energy facility registration statement pursuant to Rule R8-66 for any facility it owns and upon which it is relying as a source of power or RECs in its REPS compliance plan.

(2) Each electric power supplier shall file its REPS compliance plan with the Commission on or before September 1 of each year.

(3) Any electric power supplier subject to Rule R8-60 shall file its REPS compliance plan as part of its integrated resource plan filing, and the

REPS compliance plan will be reviewed and approved pursuant to Rule R8-60. Approval of the REPS compliance plan as part of the integrated resource plan shall not constitute an approval of the recovery of costs associated with REPS compliance or a determination that the electric power supplier has complied with G.S. 62 133.8(b), (c), (d), (e), and (f).

(4) An REPS compliance plan filed by an electric power supplier not subject to Rule R8-60 shall be for information only.

(c) REPS compliance report.

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

(i) the sources, amounts, and costs of renewable energy certificates, by source, used to comply with G.S. 62-133.8(b), (c), (d), (e) and (f). Renewable energy certificates for energy efficiency may be based on estimates of reduced energy consumption through the implementation of energy efficiency measures, to the extent approved by the Commission;

(ii) the actual North Carolina retail sales and year-end number of customer accounts by customer class;

(iii) the current avoided cost rates and the avoided cost rates applicable to energy received pursuant to long-term power purchase agreements;

(iv) the actual total and incremental costs incurred <u>during the</u> <u>calendar year</u> to comply with G.S. 62-133.8(b), (c), (d), (e) and (f);

(v) a comparison of <u>the</u> actual <u>compliance</u> <u>incremental</u> costs incurred during the calendar year to the per-account annual charges (in G.S. 62-133.8(g)(4)) applied to its total number of customer accounts as of December 31 of the previous calendar year to the annual cost caps;

(vi) the status of compliance with the requirements of G.S. 62-133.8(b), (c), (d), (e) and (f). To the extent that compliance with the requirements of G.S. 62-133.8(b), (c), (d), (e) and (f) has not been achieved, the electric power supplier shall provide a comparison of the actual incremental costs incurred during the calendar year to the per-account annual charges (in G.S. 62-133.8(g)(4)) applied to its total number of customer accounts as of December 31 of the previous calendar year;

(vii) the identification of any renewable energy certificates or energy savings to be carried forward pursuant to G.S. 62-133.8(b)(2)f or (c)(2)f;

(viii) the dates and amounts of all payments made for renewable energy certificates; and

(ix) for electric membership corporations and municipal electric suppliers, reduced energy consumption achieved after January 1, 2008, through the implementation of a demand-side management program.

(2) Each electric public utility shall file its annual REPS compliance report, together with direct testimony and exhibits of expert witnesses, on the same date that it files (1) its cost recovery request under Rule R8-67(e), and (2) the information required by Rule R8-55. The Commission shall consider each electric public utility's REPS compliance report at the hearing provided for in subsection (e) of this rule and shall determine whether the electric public utility has complied with G.S. 62-133.8(b), (d), (e) and (f). Public notice and deadlines for intervention and filing of additional direct and rebuttal testimony and exhibits shall be as provided for in subsection (e) of this rule.

(3) Each electric membership corporation and municipal electric supplier or their designated utility compliance aggregator shall file a verified REPS compliance report on or before September 1 of each year. The Commission may issue an order scheduling a hearing to consider the REPS compliance report filed by each electric membership corporation or municipal electric supplier, requiring public notice, and establishing deadlines for intervention and the filing of direct and rebuttal testimony and exhibits.

(4) In each electric power supplier's initial REPS compliance report, the electric power supplier shall propose a methodology for determining its cap on incremental costs incurred to comply with G.S. 62-133.8(b), (c), (d), (e) and (f) and fund research as provided in G.S. 62-133.8(h)(1), including a determination of year-end number of customer accounts. The proposed methodology may be specific to each electric power supplier, shall be based upon a fair and reasonable allocation of costs, and shall be consistent with G.S. 62-133.8(h). The electric power supplier may propose a different methodology that meets the above requirements in a subsequent REPS compliance report filing. For electric public utilities, this methodology shall also be used for assessing the per-account charges pursuant to G.S. 62-133.8(h)(5).

(5) In any year, an electric power supplier or other interested party may petition the Commission to modify or delay the provisions of G.S. 62-133.8(b), (c), (d), (e) and (f), in whole or in part. The Commission may grant such petition upon a finding that it is in the public interest to do so. If an electric power supplier is the petitioner, it shall demonstrate that it has made a reasonable effort to meet the requirements of such provisions. Retroactive modification or delay of the provisions of G.S. 62-133.8(b), (c), (d), (e) or (f) shall not be permitted. The Commission shall allow a modification or delay only with respect to the electric power supplier or group of electric power suppliers for which a need for a modification or delay has been demonstrated.

(6) A group of electric power suppliers may aggregate their REPS obligations and compliance efforts provided that all suppliers in the group are subject to the same REPS obligations and compliance methods as stated in either G.S. 133.8(b) or (c). If such a group of electric power suppliers fails to

meet its REPS obligations, the Commission shall find and conclude that each supplier in the group, individually, has failed to meet its REPS obligations.

(d) Renewable energy certificates.

(1) Renewable energy certificates (whether or not bundled with electric power) claimed by an electric power supplier to comply with G.S. 62-133.8(b), (c), (d), (e) and (f) must have been earned after January 1, 2008; must have been purchased by the electric power supplier within three years of the date they were earned; shall be retired when used for compliance; and shall not be used for any other purpose. A renewable energy certificate may be used to comply with G.S. 62-133.8(b), (c), (d), (e) and (f) in the year in which it is acquired or obtained by an electric power supplier or in any subsequent year; provided, however, that an electric public utility must use a renewable energy certificate to comply with G.S. 62-133.8(b), (d), (e) and (f) within seven years of cost recovery pursuant to subsection (e)(10) of this Rule.

(2) For any facility that uses both renewable energy resources and nonrenewable energy resources to produce energy, the facility shall earn renewable energy certificates based only upon the energy derived from renewable energy resources in proportion to the relative energy content of the fuels used.

(3) Renewable energy certificates earned by a renewable energy facility after the date the facility's registration is revoked by the Commission shall not be used to comply with G.S. 62-133.8(b), (c), (d), (e) and (f).

(4) Renewable energy certificates must be issued by, or imported into, the renewable energy certificate tracking system established in Rule R8-67(h) in order to be eligible RECs under G.S. 62-133.8(b)(2)e or G.S. 62-133.8(c)(2)d.

(e) Cost recovery.

(1) For each electric public utility, the Commission shall schedule an annual public hearing pursuant to G.S. 62-133.8(h) to review the costs incurred by the electric public utility to comply with G.S. 62-133.8(b), (d), (e) and (f). The annual rider hearing for each electric public utility will be scheduled as soon as practicable after the hearing held by the Commission for the electric public utility under Rule R8-55.

(2) The Commission shall permit each electric public utility to charge an increment or decrement as a rider to its rates to recover in a timely manner the reasonable incremental costs prudently incurred to comply with G.S. 62-133.8(b), (d), (e) and (f). The cost of an unbundled renewable energy certificate, to the extent that it is reasonable and prudently incurred, is an incremental cost and has no avoided cost component.

(3) Unless otherwise ordered by the Commission, the test period for each electric public utility shall be the same as its test period for purposes of Rule R8-55.

(4) Rates set pursuant to this section shall be recovered during a fixed cost recovery period that shall coincide, to the extent practical, with the recovery

period for the cost of fuel and fuel-related cost rider established pursuant to Rule R8-55.

(5) The incremental costs will be further modified through the use of an REPS experience modification factor (REPS EMF) rider. The REPS EMF rider will reflect the difference between reasonable and prudently incurred incremental costs and the revenues that were actually realized during the test period under the REPS rider then in effect. Upon request of the electric public utility, the Commission shall also incorporate in this determination the experienced over-recovery or under-recovery of the incremental costs up to thirty (30) days prior to the date of the hearing, provided that the reasonableness and prudence of these costs shall be subject to review in the utility's next annual REPS cost recovery hearing.

(6) The REPS EMF rider will remain in effect for a fixed 12-month period following establishment and will carry through as a rider to rates established in any intervening general rate case proceedings.

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

(8) Each electric public utility shall follow deferred accounting with respect to the difference between actual reasonable and prudently-incurred incremental costs and related revenues realized under rates in effect.

(9) The incremental costs to be recovered by an electric public utility in any cost recovery period from its North Carolina retail customers to comply with G.S. 62-133.8(b), (d), (e), and (f) shall not exceed the per-account charges set forth in G.S. 62-133.8(h)(4) applied to the electric public utility's year-end number of customer accounts determined as of December 31 of the previous calendar year. These annual charges shall be collected through fixed monthly charges. Each electric public utility shall ensure that the incremental costs recovered under the REPS rider and REPS EMF rider during the cost recovery period, inclusive of gross receipts tax and the regulatory fee, from any given customer account do not exceed the applicable per-account charges set forth in G.S. 62-133.8(h)(4).

(10) <u>Incremental Incurred</u> costs <u>incurred during a calendar year toward</u> a current or future year's REPS obligation may be recovered by an electric public utility in any <u>12-month recovery period up to and including the 12-month recovery</u> period in which the RECs associated with any incremental costs are retired toward the prior year's REPS obligation, after a renewable energy certificate is acquired or obtained until the renewable energy certificate is used to comply with G.S. 62-133.8(b), (d), (e) and (f) as long as the electric public utility's <u>charges to</u> total annual incremental costs recovered from customers in that year do not exceed, in any 12-month period, the per-account annual charges provided in G.S. 62-133.8(h)(4). Incremental costs that exceed the per-account annual charges provided in G.S. 62-133.8(h)(4) in the year in which a renewable energy

certificate is used to comply with G.S. 62-133.8(b), (d), (e), and (f) may not be recovered. A renewable energy certificate must be used for compliance and retired within seven years of the year in which the electric public utility recovers the related costs from customers. An electric public utility shall refund to customers with interest the costs for renewable energy certificates that are not used for compliance within seven years.

(11) Each electric public utility, at a minimum, shall submit to the Commission for purposes of investigation and hearing the information required for the REPS compliance report for the 12-month test period established in subsection (3) normalized, as appropriate, consistent with Rule R8-55, accompanied by supporting workpapers and direct testimony and exhibits of expert witnesses, and any change in rates proposed by the electric public utility at the same time that it files the information required by Rule R8-55.

(12) The electric public utility shall publish a notice of the annual hearing for two (2) successive weeks in a newspaper or newspapers having general circulation in its service area, normally beginning at least 30 days prior to the hearing, notifying the public of the hearing before the Commission pursuant to G.S. 62-133.8(h) and setting forth the time and place of the hearing.

(13) Persons having an interest in said hearing may file a petition to intervene setting forth such interest at least 15 days prior to the date of the hearing. Petitions to intervene filed less than 15 days prior to the date of the hearing may be allowed in the discretion of the Commission for good cause shown.

(14) The Public Staff and other intervenors shall file direct testimony and exhibits of expert witnesses at least 15 days prior to the hearing date. If a petition to intervene is filed less than 15 days prior to the hearing date, it shall be accompanied by any direct testimony and exhibits of expert witnesses the intervenor intends to offer at the hearing.

(15) The electric public utility may file rebuttal testimony and exhibits of expert witnesses no later than 5 days prior to the hearing date.

(16) The burden of proof as to whether the costs were reasonable and prudently incurred shall be on the electric public utility.

(f) Contracts with owners of renewable energy facilities.

(1) The terms of any contract entered into between an electric power supplier and a new solar electric facility or new metered solar thermal energy facility shall be of sufficient length to stimulate development of solar energy.

(2) Each electric power supplier shall include appropriate language in all agreements for the purchase of renewable energy certificates (whether or not bundled with electric power) prohibiting the seller from remarketing the renewable energy certificates being purchased by the electric power supplier.

(g) Metering of renewable energy facilities.

(1) Except as provided below, for the purpose of receiving renewable energy certificate issuance in NC-RETS, the electric power generated by a

renewable energy facility shall be measured by an electric meter supplied by and read by an electric power supplier. Facilities whose renewable energy certificates are issued in a tracking system other than NC-RETS shall be subject to the requirements of the applicable state commission and/or tracking system.

(2) The electric power generated by an inverter-based solar photovoltaic (PV) system with a nameplate capacity of 10 kW or less may be estimated using generally accepted analytical tools.

(3) The electric power generated by a renewable energy facility interconnected on the customer's side of the utility meter at a customer's location may be measured by (1) an ANSI-certified electric meter not provided by an electric power supplier provided that the owner of the meter complies with the meter testing requirements of Rule R8-13, or (2) another industry-accepted, auditable and accurate metering, controls, and verification system. The data provided by such meter or system may be read and self-reported by the owner of the renewable energy facility, subject to audit by the Public Staff. The owner of the meter shall retain for audit for 10 years the energy output data.

(4) Thermal energy produced by a combined heat and power system or solar thermal energy facility shall be the thermal energy recovered and used for useful purposes other than electric power production. The useful thermal energy may be measured by meter, or if that is not practicable, by other industry-accepted means that show what measurable amount of useful thermal energy the system or facility is designed and operated to produce and use. Renewable energy certificates shall be earned based on one certificate for every 3,412,000 British thermal units (Btu) of useful thermal energy produced. <u>Meter devices, if used, Btu meters</u> shall be located so as to measure the actual thermal energy consumed by the load served by the facility. Thermal energy output that is used as station power or to process the facility's fuel is not eligible for RECs. Thermal energy production, whether based on engineering estimates or Btu metering, shall explicitly address thermal energy flows as well as heat energy transfers. Thermal energy production data, whether metered or estimated, shall be retained for audit for 10 years.

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

(1) Definitions

(i) "Balancing area operator" means an electric power supplier that has the responsibility to act as the balancing authority for a portion of the regional transmission grid, including maintaining the load-to-generation balance, accounting for energy delivered into and exported out of the area, and supporting interconnection frequency in real time.

(ii) "Multi-fuel facility" means a renewable energy facility that produces energy using more than one fuel type, potentially relying on a fuel that does not qualify for REC issuance in North Carolina. (iii) "Participant" means a person or organization that opens an account in NC-RETS.

(iv) "Qualifying thermal energy output" is the useful thermal energy: (1) that is made available to an industrial or commercial process (net of any heat contained in condensate return and/or makeup water); (2) that is used in a heating application (e.g., space heating, domestic hot water heating); or (3) that is used in a space cooling application (i.e., thermal energy used by an absorption chiller).

(2) A renewable energy certificate (REC) tracking system, to be known as NC-RETS, is established by the Commission. NC-RETS shall issue, track, transfer and retire RECs. It shall calculate each electric power supplier's REPS obligation and report each electric power supplier's REPS accomplishments, consistent with the compliance report filed under <u>Rule</u> R8-67(c). NC-RETS shall be administered by a third-party vendor selected by the Commission. Only RECs issued by or imported into NC-RETS are qualifying RECs under G.S. 62-133.8.

(3) Each electric power supplier shall be a participant in NC-RETS and shall provide data to NC-RETS to calculate its REPS obligation and to demonstrate its compliance with G.S. 62-133.8. An electric power supplier may select a utility compliance aggregator to participate in NC-RETS on its behalf and file REPS compliance plans and compliance reports, but the supplier shall nonetheless remain responsible for its own compliance. For reporting purposes, an electric power supplier or its utility compliance aggregator may aggregate the supplier's compliance obligations and accomplishments with those of other suppliers that are subject to the same obligations under G.S. 62-133.8.

(4) Each renewable energy facility or new renewable energy facility registered by the Commission under Rule R8-66 shall participate in NC-RETS in order to have RECs issued, or in another REC tracking system in order to have RECs issued and transferred into NC-RETS, but by no means shall a facility's meter data for the same time period shall be used for simultaneous REC issuance in two such systems. Beginning January June 1, 2011, renewable energy facilities registered in NC-RETS may only enter historic energy production data for REC issuance that goes back up to two years from the current date. Facilities that produce energy using one or more renewable energy resource(s) and another resource that does not qualify toward REPS compliance under G.S. 62-133.8 shall calculate on a monthly basis and provide to NC-RETS the percentage of energy output attributable to each fuel source. NC-RETS will issue RECs only for energy emanating from sources that qualify under G.S. 62-133.8.

(5) Each balancing area operator shall provide monthly electric generation production data to NC-RETS for renewable and new renewable energy facilities that are interconnected to the operator's electric transmission system. Such balancing area operator shall retain documentation verifying the production data for audit by the Public Staff.

(6) Each electric power supplier that has registered renewable energy facilities or new renewable energy facilities interconnected with its electric distribution system and that reads the electric generation production meters for

those facilities shall provide monthly the facilities' energy output to NC-RETS, and shall retain for audit for 10 years that energy output data. Municipalities and electric membership corporations may elect to have the facilities' production data reported to NC-RETS and retained for audit by a utility compliance aggregator.

(7) A renewable energy facility or new renewable energy facility that produces thermal energy that qualifies for RECs shall report the facility's qualifying thermal energy output to NC-RETS at least every 12 months. A renewable energy facility or new renewable energy facility that reports its data pursuant to Rule R8-67(g)(3) shall report its energy output to NC-RETS at least every 12 months.

(8) The owner of an inverter-based solar photovoltaic system with a nameplate capacity of 10 kW or less may estimate its energy output using generally accepted analytical tools pursuant to Rule R8-67(g)(2). Such an owner, or its agent, of this kind of facility shall report the facility's energy output to NC-RETS at least every 12 months.

(9) All energy output and fuel data for multi-fuel facilities, including underlying documentation, calculations, and estimates, shall be retained for audit for at least ten years immediately following the provision of the output data to NC-RETS or another tracking system, as appropriate.

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

(11) All Commission-approved costs of developing and operating NC-RETS shall be allocated among all electric power suppliers based upon their respective share of the total megawatt-hours of retail electricity sales in North Carolina in the previous calendar year. Each electric power supplier, or its utility compliance aggregator, shall, within 60 days of NC-RETS beginning operations, and by May June 1 of each subsequent year, enter its previous year's retail electricity sales into NC-RETS, which sales will be used by NC-RETS to calculate each electric power supplier's REPS obligations and NC-RETS charges. NC-RETS shall update its billings beginning each June July based on retail sales data for the previous calendar year. Such NC-RETS charges shall be deemed to be costs that are reasonable, prudent, incremental, and eligible for recovery through each electric public utility's annual rider established pursuant to G.S. 62-133.8(h).

(12) Each account holder in NC-RETS shall pay the NC-RETS administrator for service according to the following fee schedule:

(i) \$0.01 for each REC export to an account residing in a different REC tracking system.

(ii) \$0.01 for each REC retired for reasons other than compliance with G.S. 62-133.8.

(13) The Commission shall adopt NC-RETS Operating Procedures. The Commission shall establish an NC-RETS Stakeholder Group that shall meet from time to time and which may recommend changes to the NC-RETS Operating Procedures and NC-RETS.

(14) All data retention requirements of this Rule R8-67(h) may be accomplished via retention of electronic documents.

Rule R8-68. INCENTIVE PROGRAMS FOR ELECTRIC PUBLIC UTILITIES AND ELECTRIC MEMBERSHIP CORPORATIONS, INCLUDING ENERGY EFFICIENCY AND DEMAND-SIDE MANAGEMENT PROGRAMS

(a) Purpose. — The purpose of this rule is to establish guidelines for the application of G.S. 62-140(c) and G.S. 62-133.9 to electric public utilities and electric membership corporations that are consistent with the directives of those statutes and consistent with the public policy of this State as set forth in G.S. 62-2.

(b) Definitions.

(1) Unless listed below, the definitions of all terms used in this rule shall be as set forth in Rule R8-67(a), or if not defined therein, then as set forth in G.S. 62-3, G.S. 62-133.8(a) and G.S. 62-133.9(a).

"Consideration" means anything of economic value paid, given, or (2) offered to any person by an electric public utility or electric membership corporation (regardless of the source of the "consideration") including, but not limited to: payments to manufacturers, builders, equipment dealers, contractors including HVAC contractors, electricians, plumbers, engineers, architects, and/or homeowners or owners of multiple housing units or commercial establishments; cash rebates or discounts on equipment/appliance sales, leases, or service installation; equipment/ appliances sold below fair market value or below their cost to the electric public utility or electric membership corporation; low interest loans, defined as loans at an interest rate lower than that available to the person to whom the proceeds of the loan are made available; studies on energy usage; model homes; and payment of trade show or advertising costs. Excepted from the definition of "consideration" are favors and promotional activities that are de minimis and nominal in value and that are not directed at influencing fuel choice decisions for specific applications or locations.

(3) "Costs" include, but are not limited to, all capital costs (including cost of capital and depreciation expenses), administrative costs, implementation costs, participation incentives, and operating costs. "Costs" does not include utility incentives.

(4) "Electric public utility" means a person, whether organized under the laws of this State or under the laws of any other state or country, now or hereafter owning or operating in this State equipment or facilities for producing, transporting, distributing, or furnishing electric service to or for the public for consumption. For purposes of this rule, "electric public utility" does not include electric membership corporations.

(5) "Net lost revenues" means the revenue losses, net of marginal costs avoided at the time of the lost kilowatt-hour sale(s), or in the case of purchased power, in the applicable billing period, incurred by the electric public utility as the result of a new demand-side management or energy efficiency measure. Net lost revenues shall also be net of any increases in revenues resulting from any activity by the electric public utility that causes a customer to increase demand or energy consumption, whether or not that activity has been approved pursuant to this Rule R8-68.

(6) "New demand-side management or energy efficiency measure" means a demand-side management or energy efficiency measure that is adopted and implemented on or after January 1, 2007, including subsequent changes and modifications to any such measure. Cost recovery for "new demand-side management measures" and "new energy efficiency measures" is subject to G.S. 62-133.9.

(7) "Participation incentive" means any consideration associated with a new demand-side management or energy efficiency measure.

(8) "Program" or "measure" means any electric public utility action or planned action that involves the offering of consideration.

(9) "Utility incentives" means incentives as described in G.S. 62-133.9(d)(2)a-c.

(c) Filing for Approval.

(1) Application of Rule.

(i) Prior to an electric public utility or electric membership corporation implementing any measure or program, the purpose or effect of which is to directly or indirectly alter or influence the decision to use the electric public utility's or electric membership corporation's service for a particular end use or to directly or indirectly encourage the installation of equipment that uses the electric public utility's or electric membership corporation's service, or any new or modified demand-side management or energy efficiency measure, the electric public utility or the electric membership corporation shall obtain Commission approval, regardless of whether the measure or program is offered at the expense of the shareholders, ratepayers, or third-party.

(ii) This requirement shall also apply to measures and programs that are administered, promoted, or funded by the electric public utility's or electric membership corporation's subsidiaries, affiliates, or unregulated divisions or businesses if the electric public utility or electric membership corporation has control over the entity offering or is involved in the measure or program and an intent or effect of the measure or program is to adopt, secure, or increase the use of the electric public utility's public utility services.

(iii) Any application for approval by an electric public utility or electric membership corporation of a measure or program under this rule shall be made in a unique sub-docket of the electric public utility's or electric membership corporation's docket number.

(2) Filing Requirements. — Each application for the approval shall include:

(i) Cover Page. – The electric public utility or electric membership corporation shall attach to the front of an application a cover sheet generally describing:

a. the measure or program;

b. the consideration to be offered;

c. the anticipated total cost of the measure or program;

d. the source and amount of funding to be used; and

e. the proposed classes of persons to whom it will be offered.

(ii) Description. – The electric public utility or electric membership corporation shall provide a description of each measure and program, and include the following:

a. the program or measure's objective;

b. the duration of the program or measure;

c. the targeted sector and eligibility requirements;

d. examples of all communication materials to be used with the measure or program and the related cost for each program year;

e. the estimated number of participants;

f. the impact that each measure or program is expected to have on the electric public utility or electric membership corporation, its customer body as a whole, and its participating North Carolina customers; and

g. any other information the electric public utility or electric membership corporation believes is relevant to the application, including information on competition known by the electric public utility or the electric membership corporation. (iii) Additionally, an electric public utility shall include or describe:

a. the measure's proposed marketing plan, including a description of market barriers and how the electric public utility intends to address them;

b. the total market potential and estimated market growth throughout the life of the measure duration of the program;

c. the estimated summer and winter peak demand reduction by unit metric and in the aggregate by year;

d. the estimated energy reduction per appropriate unit metric and in the aggregate by year;

e. the estimated lost energy sales per appropriate unit metric and in the aggregate by year; <u>and</u>

f. the estimated load shape impacts.; and

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

Costs and Benefits. — The electric public utility or electric (iv) membership corporation shall provide the following information on the costs and benefits of each proposed measure or program: (a) the estimated total and per unit cost and benefit of the measure or program to the electric public utility or electric membership corporation, reported by type of benefit and expenditure (e.g., capital cost expenditures; administrative costs; operating costs; participation incentives, such as rebates and direct payments; and communications costs, and the costs of measurement and verification) and the planned accounting treatment for those costs and benefits; (b) the type, the maximum and minimum amount of participation incentives to be made to any party, and the reason for any participation incentives and other consideration and to whom they will be offered, including schedules listing participation incentives and other consideration to be offered; and (c) service limitations or conditions planned to be imposed on customers who do not participate in the measure. With respect to communications costs, the electric public utility or electric membership corporation shall provide detailed cost information on communications materials related to each proposed measure or program. Such costs shall be included in the Commission's consideration of the total cost of the measure or program and whether the total cost of the measure or program is reasonable in light of the benefits.

(v) Cost-Effectiveness Evaluation. — The electric public utility or electric membership corporation shall provide the economic justification for each proposed measure or program, including the results of all cost-effectiveness tests. Cost-effectiveness evaluations performed by the electric public utility or electric membership corporation should be based on direct or quantifiable costs and benefits and should include, at a minimum, an analysis of the Total Resource Cost Test, the Participant Test, the Utility Cost Test, and the Ratepayer Impact Measure Test. In addition, an electric public utility shall describe the methodology used to produce the impact estimates as well as, if appropriate, methodologies considered and rejected in the interim leading to the final model specification.

(vi) Commission Guidelines Regarding Incentive Programs. — The electric public utility or electric membership corporation shall provide the information necessary to comply with the Commission's Revised Guidelines for Resolution of Issues Regarding Incentive Programs, issued by Commission Order on March 27, 1996, in Docket No. M-100, Sub 124, set out as an Appendix to Chapter 8 of these rules.

(vii) Integrated Resource Plan. — When seeking approval of a new demand-side management or new energy efficiency measure, the electric public utility or electric membership corporation shall explain in detail how the measure is consistent with the electric public utility's or electric membership corporation's integrated resource plan filings pursuant to Rule R8-60.

(viii) Other. — Any other information the electric public utility or electric membership corporation believes relevant to the application, including information on competition known by the electric public utility or the electric membership corporation.

(3) Additional Filing Requirements. — In addition to the information listed in subsection (c)(2), an electric public utility filing for approval of a new or modified demand-side management or energy efficiency measure shall provide the following:

(i) Costs and Benefits. – The electric public utility shall describe:

a. any costs incurred or expected to be incurred in adopting and implementing a measure or program to be considered for recovery through the annual rider under G.S. 62-133.9;

b. estimated total costs to be avoided by the measure by appropriate capacity, energy and measure unit metric and in the aggregate by year;

c. estimated participation incentives by appropriate capacity, energy, and measure unit metric and in the aggregate by year;

d. how the electric public utility proposes to allocate the costs and benefits of the measure among the customer classes and jurisdictions it serves;

e. the capitalization period to allow the utility to recover all costs or those portions of the costs associated with a new program or measure to the extent that those costs are intended to produce future benefits as provided in G.S. 62-133.9(d)(1).

f. The electric public utility shall also include the estimated and known costs of measurement and verification activities pursuant to the Measurement and Verification Reporting Plan described in paragraph (ii).

(ii) Measurement and Verification Reporting Plan for New Demand-Side Management and Energy Efficiency Measures. — The electric public utility shall be responsible for the measurement and verification of energy and peak demand savings and may use the services of an independent third party for such purposes. The costs of implementing the measurement and verification process may be considered as operating costs for purposes of Commission Rule R8-69. In addition, the electric public utility shall:

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

b. provide a schedule for reporting the savings to the Commission;

c. describe the methodologies used to produce the impact estimates, as well as, if appropriate, the methodologies it considered and rejected in the interim leading to final model specification; and

d. identify any third party and include all of the costs of that third party, if the electric public utility plans to utilize an independent third party for purposes of measurement and verification.

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

(iv) Tariffs or rates. — The electric public utility shall provide proposed tariffs or modifications to existing tariffs that will be required to implement each measure or program.

(v) Utility Incentives. — When seeking approval of new demand-side management and energy efficiency measures, the electric public utility shall indicate whether it will seek to recover any utility incentives, including, if appropriate, net lost revenues, in addition to its costs. If the electric public utility proposes recovery of utility incentives related to the proposed new demand-side management or energy efficiency measure, it shall describe the utility incentives it desires to recover and describe how its measurement and verification reporting plan will demonstrate the results achieved by the proposed measure. If the electric public utility proposes recovery of net lost revenues, it shall describe estimated net lost revenues by appropriate capacity, energy and measure unit metric and in the aggregate by year. If the electric public

utility seeks recovery of utility incentives, including net lost revenues, apart from its recovery of its costs under G.S. 62-133.9, it shall file estimates of the utility incentives and the net lost revenues associated with the proposed measure for each year of the proposed recovery. If the electric public utility seeks only the recovery of net lost revenues apart from its recovery of combined costs and utility incentives, it shall file estimates of net lost revenues for each year of the proposed recovery period.

(d) Procedure.

(1) Automatic Tariff Suspension. – If an electric public utility files a proposed tariff or tariff amendment in connection with an application for approval of a measure or program, the tariff filing shall be automatically suspended pursuant to G.S. 62-134 pending investigation, review, and decision by the Commission.

(2)Service and Response. - The electric public utility or electric membership corporation filing for approval of a measure or program shall serve a copy of its filing on the Public Staff; the Attorney General; the natural gas utilities, electric public utilities, and electric membership corporations operating in the filing electric public utility's or electric membership corporation's certified territory; and any other party that has notified the electric public utility or electric membership corporation in writing that it wishes to be served with copies of all filings. If a party consents, the electric public utility or electric membership corporation may serve it with electronic copies of all filings. Those served, and others learning of the application, shall have thirty (30) days from the date of the filing in which to petition for intervention pursuant to R1-19, file a protest pursuant to Rule R1-6, or file comments on the proposed measure or program. In comments, any party may recommend approval or disapproval of the measure or program or identify any issue relative to the program application that it believes requires further investigation. The filing electric public utility or electric membership corporation shall have the opportunity to respond to the petitions, protests, or comments within ten (10) days of their filing. If any party raises an issue of material fact, the Commission shall set the matter for hearing. The Commission may determine the scope of this hearing.

(3) Notice and Schedule. — If the application is set for hearing, the Commission shall require notice, as it considers appropriate, and shall establish a procedural schedule for prefiled testimony and rebuttal testimony after a discovery period of at least 45 days. Where possible, the hearing shall be held within ninety (90) days from the application filing date.

(e) Scope of Review. — In determining whether to approve in whole or in part a new measure or program or changes to an existing measure or program, the Commission may consider any information it determines to be relevant, including any of the following issues:

(1) Whether the proposed measure or program is in the public interest and benefits the electric public utility's or electric membership corporation's overall customer body; (2) Whether the proposed measure or program unreasonably discriminates among persons receiving or applying for the same kind and degree of service;

(3) Evidence of consideration or compensation paid by any competitor, regulated or unregulated, of the electric public utility or electric membership corporation to secure the installation or adoption of the use of such competitor's services;

(4) Whether the proposed measure or program promotes unfair or destructive competition or is inconsistent with the public policy of this State as set forth in G.S. 62-2 and G.S. 62-140; and

(5) The impact of the proposed measure or program on peak loads and load factors of the filing electric public utility or electric membership corporation, and whether it encourages energy efficiency.

(f) Cost Recovery for New Measures. – Approval of a program or measure under Commission Rule R8-68 does not constitute approval of rate recovery of the costs of the program or measure. With respect to new demand-side management and energy efficiency measures, the costs of those new measures, approved by application of this rule, that are found to be reasonable and prudently incurred shall be recovered through the annual rider described in G.S. 62-133.9 and Rule R8-69. The Commission may consider in the annual rider proceeding whether to approve the inclusion of any utility incentive pursuant to G.S. 62-133.9(d)(2)a.-c. in the annual rider.

Rule R8-69. COST RECOVERY FOR DEMAND-SIDE MANAGEMENT AND ENERGY EFFICIENCY MEASURES OF ELECTRIC PUBLIC UTILITIES

(a) Definitions.

(1) Unless listed below, the definitions of all terms used in this rule shall be as set forth in Rules R8-67 and R8-68, or if not defined therein, then as set forth in G.S. 62-133.8(a) and G.S. 62-133.9(a).

(2) "DSM/EE rider" means a charge or rate established by the Commission annually pursuant to G.S. 62-133.9(d) to allow the electric public utility to recover all reasonable and prudent costs incurred in adopting and implementing new demand-side management and energy efficiency measures after August 20, 2007, as well as, if appropriate, utility incentives, including net lost revenues.

(3) "Large commercial customer" means any commercial customer that has an annual energy usage of not less than 1,000,000 kilowatt-hours (kWh), measured in the same manner as the electric public utility that serves the commercial customer measures energy for billing purposes.

(4) "Rate period" means the period during which the DSM/EE rider established under this rule will be in effect. For each electric public utility, this period will be the same as the period during which the rider established under Rule R8-55 is in effect.

(5) "Test period" shall be the same for each public utility as its test period for purposes of Rule R8-55, unless otherwise ordered by the Commission.

(b) Recovery of Costs.

Each year the Commission shall conduct a proceeding for each (1) electric public utility to establish an annual DSM/EE rider. The DSM/EE rider shall consist of a reasonable and appropriate estimate of the expenses expected to be incurred by the electric public utility, during the rate period, for the purpose of adopting and implementing new demand-side management and energy efficiency measures previously approved pursuant to Rule R8-68. The expenses will be further modified through the use of a DSM/EE experience modification factor (DSM/EE EMF) rider. The DSM/EE EMF rider will reflect the difference between the reasonable expenses prudently incurred by the electric public utility during the test period for that purpose and the revenues that were actually realized during the test period under the DSM/EE rider then in effect. Those expenses approved for recovery shall be allocated to the North Carolina retail jurisdiction consistent with the system benefits provided by the new demand-side management and energy efficiency measures and shall be assigned to customer classes in accordance with G.S. 62-133.9(e) and (f).

(2) Upon the request of the electric public utility, the Commission shall also incorporate the experienced over-recovery or under-recovery of costs up to thirty (30) days prior to the date of the hearing in its determination of the DSM/EE EMF rider, provided that the reasonableness and prudence of these costs shall be subject to review in the utility's next annual DSM/EE rider hearing.

(3) Pursuant to G.S. 62-130(e), any over-collection of reasonable and prudently incurred costs to be refunded to an electric public utility's customers through operation of the DSM/EE EMF rider shall include an amount of interest, at such rate as the Commission determines to be just and reasonable, not to exceed the maximum statutory rate. The beginning date for measurement of such interest shall be the effective date of the DSM/EE EMF rider in each annual proceeding, unless otherwise determined by the Commission.

(4) The burden of proof as to whether the costs were reasonably and prudently incurred shall be on the electric public utility.

(5) Any costs incurred for adopting and implementing measures that do not constitute new demand-side management or energy efficiency measures are ineligible for recovery through the annual rider established in G.S. 62-133.9.

(6) Except as provided in (c)(3) of this rule, each electric public utility may implement deferral accounting for costs considered for recovery through the annual rider. At the time the Commission approves a new demand-side management or energy efficiency measure under Rule R8-68, the electric public utility may defer costs of adopting and implementing the new measure in accordance with the Commission's approval order under Rule R8-68. Subject to the Commission's review, the electric public utility may begin deferring the costs of adopting and implementing new demand-side management or energy efficiency measures six (6) months prior to the filing of its application for approval

under Rule R8-68, except that the Commission may consider earlier deferral of development costs in exceptional cases, where such deferral is necessary to develop an energy efficiency measure. Deferral accounting, however, for any administrative costs, general costs, or other costs not directly related to a new demand-side management or energy efficiency measure must be approved prior to deferral. The balance in the deferral account, net of deferred income taxes, may accrue a return at the net-of-tax rate of return approved in the electric public utility's most recent general rate proceeding. The return so calculated will be adjusted in any rider calculation to reflect necessary recoveries of income taxes. This return is not subject to compounding. The accrual of such return of on any under-recovered or over-recovered balance set in an annual proceeding for recovery or refund through a DSM/EE EMF rider shall cease as of the effective date of the DSM/EE EMF rider in that proceeding, unless otherwise determined by the Commission. However, deferral accounting of costs shall not affect the Commission's authority under this rule to determine whether the deferred costs may be recovered.

(c) Utility Incentives.

(1) With respect to a new demand-side management or energy efficiency measure previously approved under Rule R8-68, the electric public utility may, in its annual filing, apply for recovery of any utility incentives, including, if appropriate, net lost revenues, identified in its application for approval of the measure. The Commission shall determine the appropriate ratemaking treatment for any such utility incentives.

(2) When requesting inclusion of a utility incentive in the annual rider, the electric public utility bears the burden of proving its calculations of those utility incentives and the justification for including them in the annual rider, either through its measurement and verification reporting plan or through other relevant evidence.

(3) An electric public utility shall not be permitted to implement deferral accounting or the accrual of a return for utility incentives unless the Commission approves an annual rider that provides for recovery of an integrated amount of costs and utility incentives. In that instance, the Commission shall determine the extent to which deferral accounting and the accrual of a return will be allowed.

(d) Special Provisions for Industrial or Large Commercial Customers.

(1) Pursuant to G.S. 62-133.9(f), any industrial customer or large commercial customer may notify its electric power supplier that: (i) it has implemented or, in accordance with stated, quantifiable goals, will implement alternative demand-side management or energy efficiency measures; and (ii) it elects not to participate in demand-side management or energy efficiency measures for which cost recovery is allowed under G.S. 62-133.9. Any such customer shall be exempt from any annual rider established pursuant to this rule after the date of notification.

(2) At the time the electric public utility petitions for the annual rider, it shall provide the Commission with a list of those industrial or large commercial

customers that have opted out of participation in the new demand-side management or energy efficiency measures. The electric public utility shall also provide the Commission with a listing of industrial or large commercial customers that have elected to participate in new measures after having initially notified the electric public utility that it declined to participate.

(3) Any customer that opts out but subsequently elects to participate in a new demand-side management or energy efficiency measure or program loses the right to be exempt from payment of the rider for five years or the life of the measure or program, whichever is longer. For purposes of this subsection, "life of the measure or program" means the capitalization period approved by the Commission to allow the utility to recover all costs or those portions of the costs associated with a program or measure to the extent that those costs are intended to produce future benefits as provided in G.S. 62-133.9(d)(1).

(e) Annual Proceeding.

(1) For each electric public utility, the Commission shall schedule an annual rider hearing pursuant to G.S. 62-133.9(d) to review the costs incurred by the electric public utility in the adoption and implementation of new demand-side management and energy efficiency measures during the test period, the revenues realized during the test period through the operation of the annual rider, and the costs expected to be incurred during the rate period and shall establish annual DSM/EE and DSM/EE EMF riders to allow the electric public utility to recover all costs found by the Commission to be recoverable. The Commission may also approve, if appropriate, the recovery of utility incentives, including net lost revenues, pursuant to G.S. 62-133.9(d)(2) in the rider.

(2) The annual rider hearing for each electric public utility will be scheduled as soon as practicable after the hearing held by the Commission for the electric public utility under Rule R8-55. Each electric public utility shall file its application for recovery of costs and appropriate utility incentives at the same time that it files the information required by Rule R8-55.

(3) The DSM/EE EMF rider will remain in effect for a fixed 12-month period following establishment and will continue as a rider to rates established in any intervening general rate case proceeding.

(f) Filing Requirements and Procedure.

(1) Each electric public utility shall submit to the Commission all of the following information and data in its application:

(i) Projected North Carolina retail monthly kWh sales for the rate period.

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

a. total expenses expected to be incurred during the rate period in the aggregate and broken down by type of expenditure, per appropriate capacity, energy and measure unit metric and the proposed jurisdictional allocation factors; b. total costs that the utility does not expect to incur during the rate period as a direct result of the measure in the aggregate and broken down by type of cost, per appropriate capacity, energy and measure unit metric, and the proposed jurisdictional allocation factors, as well as any changes in the estimated future amounts since last filed with the Commission;

c. a description of the measurement and verification activities to be conducted during the rate period, including their estimated costs;

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

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

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

a. total expenses for the test period in the aggregate and broken down by type of expenditure, per appropriate capacity, energy and measure unit metric and the proposed jurisdictional allocation factors;

b. total costs that the utility did not incur for the test period as a direct result of the measure in the aggregate and broken down by type of cost, per appropriate capacity, energy and measure unit metric, and the proposed jurisdictional allocation factors, as well as any changes in the estimated future amounts since last filed with the Commission;

c. a description of, the results of, and the costs of all measurement and verification activities conducted in the test period;

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

e. total energy reduction in the aggregate and per appropriate measure unit metric, as well as any changes in the estimated future amounts since last filed with the Commission;

f. a discussion of the findings and the results of the program or measure;

g. evaluations of event-based programs including the date, weather conditions, event trigger, number of customers notified and number of customers enrolled; and

h. a comparison of impact estimates presented in the measure application from the previous year, those used in reporting for previous measure years, and an explanation of significant

differences in the impacts reported and those previously found or used.

(iv) For each measure for which recovery of utility incentives is requested, a detailed explanation of the method proposed for calculating those utility incentives, the actual calculation of the proposed utility incentives, and the proposed method of providing for their recovery and true-up through the annual rider. If recovery of net lost revenues is requested, the total net lost kWh sales and net lost revenues per appropriate capacity, energy, and program unit metric and in the aggregate for the test period, and the proposed jurisdictional allocation factors, as well as any changes in estimated future amounts since last filed with the Commission.

(v) Actual revenues produced by the DSM/EE rider and the DSM/EE EMF rider established by the Commission during the test period and for all available months immediately preceding the rate period.

(vi) The requested DSM/EE rider and DSM/EE EMF rider and the basis for their determination.

(vii) Projected North Carolina retail monthly kWh sales for the rate period for all industrial and large commercial accounts, in the aggregate, that are not assessed the rider charges as provided in this rule.

(viii) All workpapers supporting the calculations and adjustments described above.

(2) Each electric public utility shall file the information required under this rule, accompanied by workpapers and direct testimony and exhibits of expert witnesses supporting the information filed in this proceeding, and any change in rates proposed by the electric public utility, by the date specified in subdivision (e)(2) of this rule. An electric public utility may request a rider lower than that to which its filed information suggests that it is entitled.

(3) The electric public utility shall publish a notice of the annual hearing for two (2) successive weeks in a newspaper or newspapers having general circulation in its service area, normally beginning at least thirty (30) days prior to the hearing, notifying the public of the hearing before the Commission pursuant to G.S. 62-133.9(d) and setting forth the time and the place of the hearing.

(4) Persons having an interest in any hearing may file a petition to intervene at least 15 days prior to the date of the hearing. Petitions to intervene filed less than 15 days prior to the date of the hearing may be allowed in the discretion of the Commission for good cause shown.

(5) The Public Staff and other intervenors shall file direct testimony and exhibits of expert witnesses at least 15 days prior to the hearing date. If a petition to intervene is filed less than 15 days prior to the hearing date, it shall be accompanied by any direct testimony and exhibits of expert witnesses the intervenor intends to offer at the hearing.

(6) The electric public utility may file rebuttal testimony and exhibits of expert witnesses no later than 5 days prior to the hearing date.

CHAPTER 8. APPENDIX.

REVISED GUIDELINES FOR RESOLUTION OF ISSUES REGARDING INCENTIVE¹ PROGRAMS

(1) To obtain Commission approval of a residential or commercial program involving incentives per Rule R1-38 [now Rule R6-95 or R8-68], the sponsoring utility must demonstrate that the program is cost effective for its ratepayers.

(a) Maximum incentive payments to any party must be capable of being determined from an examination of the applicable program.

(b) Existing approved programs are grandfathered. However, utilities shall file a listing of existing approved programs subject to these guidelines, including applicable tariff sheets, and amount and type of incentives involved in each program or procedure for calculating such incentives in each program, all within 60 days after approval of these guidelines.

(c) Utilities shall file a description of any new program or of a change in an existing program, including applicable tariff sheets, and amount and type of incentives involved in each program or procedure for calculating such incentives in each program, all at least 30 days prior to changing or introducing the program.

(d) The matter of the relative efficiency of electricity versus natural gas under various scenarios (space heating alone, space heating plus A/C, etc.) cannot now be resolved. A better approach at this time would be to determine the acceptability of incentive programs herein based on the energy efficiency of electricity alone or of natural gas alone, as applicable.

(e) The criteria for determining whether or not to approve an electric program pursuant to G.S. 62-140(c) should not include consideration of the impact of an electric program on the sales of natural gas, or vice versa.

(f) Approval of a program pursuant to Commission Rule R1-38 [now Rule R6-95 or R8-68] does not constitute approval of rate recovery of the costs of the program. The appropriateness of rate recovery shall be evaluated in general rate cases or similar proceedings.

(2) If a program involves an incentive per Rule R1-38 [now Rule R6-95 or R8-68] and the incentive affects the decision to install or adopt natural gas service or electric service in the residential or commercial market, there shall be a rebuttable presumption that the program is promotional in nature.

¹ All incentives referenced in these Revised Guidelines are participation incentives as now defined in Rule R8-68(b)(7).

(a) If the presumption that a program is promotional is not successfully rebutted, the cost of the incentive may not be recoverable from the ratepayers unless the Commission finds good cause to do so.

(b) If the presumption that a program is promotional is successfully rebutted, the cost of the incentive may be recoverable from the ratepayers. The cost shall not be disallowed in a future proceeding on the grounds that the program is primarily designed to compete with other energy suppliers. The amount of any recovery shall not exceed the difference between the cost of installing equipment and/or constructing a dwelling to current state/federal energy efficiency standards and the more stringent energy efficiency requirements of the program, to the extent found just and reasonable by the Commission.

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

(3) If a program involves an incentive paid to a third party builder (residential or commercial), the builder shall be advised by the sponsoring utility that the builder may receive the incentive on a per structure basis without having to agree to: (1) a minimum number or percentage of all-gas or all-electric structures to be built in a given subdivision development or in total; or (2) the type of any given structure (gas or electric) to be built in a given subdivision development.

(a) Electric and gas utilities may continue to promote and pay incentives for all-electric and all-gas structures respectively, provided such programs are approved by the Commission.

(b) A builder shall be advised by the sponsoring utility of the availability of natural gas or electric alternatives, as appropriate.

(c) A builder receiving incentives shall not be required to advertise that the builder is exclusively an all-gas or all-electric builder for either a particular subdivision or in general.

(4) The promotional literature for any program offering energy-efficiency mortgage discounts shall explain that the structures financed under the program need not be all-electric or all-gas.

(5) Duke's proposed Food Service Program shall be modified to include a definition of qualifying equipment and of conventional equipment, and is subject to approval in accordance with guideline number 1 above.

(a) The nature or amount of incentive contained in each program encouraging the installation of commercial appliances (electric or gas) that use the sponsoring utility's energy product, such as Duke's Food Service Program, shall be unaffected by the availability or use of alternate fuels in the applicable customer's facility.

(b) Commercial clients (builders, customers, etc.) who are offered incentives for installation of appliances shall be advised by the sponsoring utility of the availability of natural gas or electric alternatives, as appropriate.

(6) Rates, rate design issues, and terms and conditions of service approved by the Commission are not subject to these guidelines.

(7) Pending applications involving incentive programs are subject to these guidelines.

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

(a) Scope of Rule.

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

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

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

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

(b) The Application.

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

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

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

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

(iv) The location of the generating facility set forth in terms of local highways, streets, rivers, streams, or other generally known local landmarks together with a map, such as a county road map, with the location indicated on the map; (v) The ownership of the site and, if the owner is other than the applicant, the applicant's interest in the site;

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

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

(viii) The projected cost of the facility;

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

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

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

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

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

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

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

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

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

(vi) An economic feasibility study of the project;

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

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

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

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

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

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

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

(6) The application and 15 copies shall be filed with the Chief Clerk of the Utilities Commission.

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

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

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

(3) If a complaint is received within 10 days after the last date of the publication of the notice, the Commission will schedule a public hearing to determine whether a certificate should be awarded and will give reasonable notice of the time and place of the hearing to the applicant and to each

complaining party and will require the applicant to publish notice of the hearing in the newspaper in which the notice of the application was published. If no complaint is received within the time specified, the Commission may, upon its own initiative, order and schedule a hearing to determine whether a certificate should be awarded and, if the Commission orders a hearing upon its own initiative, it will require notice of the hearing to be published by the applicant in the newspaper in which the notice of the application was published.

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

(d) The Certificate.

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

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

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

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

Rule R8-65. REPORT BY PERSONS CONSTRUCTING ELECTRIC GENERATING FACILITIES EXEMPT FROM CERTIFICATION REQUIREMENT

(a) All persons exempt from certification under G.S. 62-110.1(g) shall file with the Commission a report of the proposed construction of an electric generating facility before beginning construction of the facility. The report of proposed construction shall include the information prescribed in subsection (b)(1) of Rule R8-64 and shall be signed and verified by the owner of the electric generating facility or by an individual duly authorized to act on behalf of the owner for the purpose of the filing.

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

(c) The owner of the electric generating facility shall provide a copy of the report of proposed construction to the electric public utility, electric membership corporation, or municipality to which the generating facility will be interconnected.

(d) The owner of the electric generating facility shall file an original and 15 copies of the report of proposed construction with the Chief Clerk of the Utilities Commission. No filing fee is required.

(e) Upon the filing of a report of proposed construction, the Chief Clerk will assign a new docket or sub-docket number to the filing and will deliver 2 copies of the report of proposed construction to the Clearinghouse Coordinator of the Office of Policy and Planning of the Department of Administration for distribution by the Coordinator to State agencies having an interest for information only.

(f) The Commission may order a hearing on the report of proposed construction upon its own motion or upon receipt of a complaint specifying the basis thereof. Otherwise, no acknowledgment of receipt of the report of proposed construction will be issued nor will any other further action be taken by the Commission.

Rule R8-66. REGISTRATION OF RENEWABLE ENERGY FACILITIES; ANNUAL REPORTING REQUIREMENTS

(a) The following terms shall be defined as provided in G.S. 62-133.8: "electric power supplier"; "renewable energy certificate"; and "renewable energy facility."

(b) The owner, including an electric power supplier, of each renewable energy facility, whether or not required to obtain a certificate of public convenience and necessity pursuant to G.S. 62-110.1, that intends for renewable energy certificates it earns to be eligible for use by an electric power supplier to comply with G.S. 62-133.8 shall register the facility with the Commission. The registration statement may be filed separately or together with an application for a certificate of public convenience and necessity, or with a report of proposed construction by a person exempt from the certification requirement. All relevant renewable energy facilities shall be registered prior to their having RECs issued in the North Carolina Renewable Energy Tracking System (NC-RETS) pursuant to Rule R8-67(h). Contracts for power supplied by an agency of the federal government are exempt from the requirement to register and file annually with the Commission if the renewable energy certificates associated with the power are bundled with the power purchased by the electric power supplier.

(1) The owner of each renewable energy facility that has not previously done so, including a facility that is located outside of the State of North Carolina, shall include in its registration statement the following information:

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

(ii) A statement of whether the facility owner is an individual, a partnership, or a corporation and, if a partnership, the name and business address of each general partner and, if a corporation, the state and date of incorporation and the name, business telephone number, electronic mailing address, and business address, of an individual duly authorized to

act as corporate agent for the purpose of the application and, if a foreign corporation, whether domesticated in North Carolina;

(iii) The nature of the renewable energy facility, including its technology, the type and source of its power or fuel(s); whether it produces electricity, useful thermal energy, or both; and the facility's projected dependable capacity in megawatts AC and/or British thermal units, as well as its maximum nameplate capacity;

(iv) The location of the facility set forth in terms of local highways, streets, rivers, streams, or other generally known local landmarks together with a map, such as a county road map, with the location indicated on the map;

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

(vi) A complete list of all federal and state licenses, permits, and exemptions required for construction and operation of the facility, and a statement of whether each has been obtained or applied for. A copy of those that have been obtained should be filed with the application. Wind facilities with multiple turbines, where each turbine is licensed separately, may provide copies of such approvals for one such turbine of each type in the facility, but shall attest that approvals for all of the turbines are available for inspection;

(vii) The date the facility began operating. If the facility is not yet operating, the owner shall provide the facility's projected in-service date;

(viii) If the facility is already operating, the owner shall provide information regarding the amount of energy produced by the facility, net of station use, for the most recent 12-month or calendar-year period. Energy production data for a shorter time period is acceptable for facilities that have not yet operated for a full year;

(ix) The name of the entity that does (or will) read the facility's energy production meter(s) for the purpose of renewable energy certificate issuance; and

(x) Whether the facility participates in a REC tracking system, and if so, which one. If the facility does not currently participate in a REC tracking system, which tracking system the owner anticipates will be used for the purpose of REC issuance.

(2) The owner of each renewable energy facility shall certify in its registration statement and annually thereafter that it is in substantial compliance with all federal and state laws, regulations, and rules for the protection of the environment and conservation of natural resources. If a credible showing is made that the facility is not in substantial compliance with all federal and state laws, regulations, and rules for the protection of the environment and conservation of natural resources. If a credible showing is made that the facility is not in substantial compliance with all federal and state laws, regulations, and rules for the protection of the environment and conservation of natural resources, the Commission shall refer the matter to the appropriate environmental agency for review. Registration shall not be revoked unless and

until the appropriate environmental agency concludes that the facility is out of compliance and the Commission issues an order revoking the registration.

(3) The owner of each renewable energy facility shall certify in its registration statement and annually thereafter that the facility satisfies the requirements of G.S. 62-133.8(a)(5) or (7) as a renewable energy facility or new renewable energy facility, that the facility will be operated as a renewable energy facility or new renewable energy facility, and, if the facility has been placed into service, the date when it was placed into service.

(4) The owner of each renewable energy facility shall further certify in its registration statement and annually thereafter that any renewable energy certificates (whether or not bundled with electric power) sold to an electric power supplier to comply with G.S. 62-133.8 have not, and will not, be remarketed or otherwise resold for any other purpose, including another renewable energy portfolio standard or voluntary purchase of renewable energy certificates in North Carolina (such as NC GreenPower) or any other state or country, and that the electric power associated with the certificates will not be offered or sold with any representation that the power is bundled with renewable energy certificates.

(5) The owner of each renewable energy facility shall certify in its registration statement and annually thereafter that it consents to the auditing of its books and records by the Public Staff insofar as those records relate to transactions with North Carolina electric power suppliers, and agrees to provide the Public Staff and the Commission access to its books and records, wherever they are located, and to the facility.

(6) If the facility is already operating, the owner shall attest that the registration information is true and accurate for all years that the facility has earned RECs for compliance with G.S. 62-133.8. Each registration statement shall be signed and verified by the owner of the renewable energy facility or by an individual duly authorized to act on behalf of the owner for the purpose of the filing.

(7) Renewable energy facilities and new renewable energy facilities that have RECs issued in NC-RETS shall provide their annual certification electronically via NC-RETS. Annual certifications are due April 1 each year.

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

(9) An original and 15 copies of the registration statement shall be filed with the Chief Clerk of the Utilities Commission. No filing fee is required to be submitted with the registration statement.

(c) Each re-seller of renewable energy certificates derived from a renewable energy facility, including a facility that is located outside of the State of North Carolina, shall ensure that the owner of the renewable energy facility registers with the Commission prior to the sale of the certificates by the re-seller to an electric power supplier to comply with G.S. 62-133.8(b), (c), (d), (e) and (f), except that the filing requirements in subsection (b) of this Rule shall apply only to information for the year(s) corresponding to the year(s) in which the certificates to be sold were earned.

(d) Upon receipt of a registration statement, the Chief Clerk will assign a new docket or sub-docket number to the filing. The Chief Clerk will deliver 2 copies of the registration statement to the Clearinghouse Coordinator of the Office of Policy and Planning of the Department of Administration for distribution by the Coordinator to State agencies having an interest in the filing for information only.

(e) No later than ten (10) business days after the registration statement is filed with the Commission, the Public Staff shall, and any other interested persons may, file with the Commission and serve upon the registrant a recommendation regarding whether the registration statement is complete and identifying any deficiencies. If the Commission determines that the registration statement is not complete, the owner of the renewable energy facility will be required to file the missing information. Upon receipt of all required information, the Commission will promptly issue an order accepting the registration, or setting the matter for hearing.

(f) Any of the following actions may result in revocation of registration by the Commission:

(1) Falsification of or failure to disclose any required information in the registration statement or annual filing;

(2) Failure to remain in substantial compliance with all federal and state laws, regulations, and rules for the protection of the environment and conservation of natural resources;

(3) Remarketing or reselling any renewable energy certificate (whether or not bundled with electric power) after it has been sold to an electric power supplier or any other person for compliance with G.S. 62-133.8 or for any other purpose, including another renewable energy portfolio standard or voluntary purchase of renewable energy certificates in North Carolina or any other state or country, or offering or selling the electric power associated with the certificates with any representation that the power is bundled with renewable energy certificates;

(4) Failure to allow the Commission or the Public Staff access to its books and records necessary to audit REPS compliance; or

(5) Failure to provide the annual certifications required by Rule R8-66(b).

(g) NC-RETS shall maintain on its website a list of all registration statement revocations.

(h) An owner of a renewable energy facility that has registered with the Commission shall notify the Commission and the tracking system that issues the facility's RECs within fifteen (15) days of any material change in status, including ownership change, fuel change, or permit issuance or revocation. An owner of a renewable energy facility shall also notify the Commission if it wants to withdraw its registration.

Rule R8-67. RENEWABLE ENERGY AND ENERGY EFFICIENCY PORTFOLIO STANDARD (REPS)

(a) Definitions.

(1) The following terms shall be defined as provided in G.S. 62-133.8: "Combined heat and power system"; "demand-side management"; "electric power supplier"; "new renewable energy facility"; "renewable energy certificate"; "renewable energy facility"; "renewable energy resource"; and "incremental costs."

For purposes of determining an electric power supplier's avoided (2) costs, "avoided cost rates" mean an electric power supplier's most recently approved or established avoided cost rates in this state, as of the date the contract is executed, for purchases of electricity from qualifying facilities pursuant to Section 210 of the Public Utility Regulatory Policies Act of 1978. If the Commission has approved an avoided cost rate for the electric power supplier for the year when the contract is executed, applicable to contracts of the same nature and duration as the contract between the electric power supplier and the seller, that rate shall be used as the avoided cost. Therefore, for example, for a contract by an electric public utility with a term of 15 years, the avoided cost rate applicable to that contract would be the comparable, Commission-approved, 15-year, long-term, levelized rate in effect at the time the contract was executed. In all other cases, the avoided cost shall be a good faith estimate of the electric power supplier's avoided cost, levelized over the duration of the contract, determined as of the date the contract is executed, taking into consideration the avoided cost rates then in effect as established by the Commission. In any event, when found by the Commission to be appropriate and in the public interest, a good faith estimate of an electric public utility's avoided cost, levelized over the duration of the contract, determined as of the date the contract is executed, may be used in a particular REPS cost recovery proceeding. Determinations of avoided costs, including estimates thereof, shall be subject to continuing Commission oversight and, if necessary, modification should circumstances so require.

(3) "Energy efficiency measure" means an equipment, physical, or program change that when implemented results in less use of energy to perform the same function or provide the same level of service. "Energy efficiency measure" does not include demand-side management. It includes energy produced from a combined heat and power system that uses nonrenewable resources to the extent the system:

(i) Uses waste heat to produce electricity or useful, measurable thermal or mechanical energy at a retail electric customer's facility; and

(ii) Results in less energy used to perform the same function or provide the same level of service at a retail electric customer's facility.

(4) "Year-end number of customer accounts" means the number of accounts within each customer class as of December 31 for a given calendar

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

(5) "Utility compliance aggregator" is an organization that assists an electric power supplier in demonstrating its compliance with REPS. Such demonstration may include, among other things, filing REPS compliance plans or reports and participating in NC-RETS on behalf of the electric power supplier or a group of electric power suppliers.

(b) REPS compliance plan.

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

(i) a specific description of the electric power supplier's planned actions to comply with G.S. 62-133.8(b), (c), (d), (e) and (f) for each year;

(ii) a list of executed contracts to purchase renewable energy certificates (whether or not bundled with electric power), including type of renewable energy resource, expected MWh, and contract duration;

(iii) a list of planned or implemented energy efficiency measures, including a brief description of the measure and projected impacts;

(iv) the projected North Carolina retail sales and year-end number of customer accounts by customer class for each year;

(v) the current and projected avoided cost rates for each year;

(vi) the projected total and incremental costs anticipated to implement the compliance plan for each year;

(vii) a comparison of projected costs to the annual cost caps for each year;

(viii) for electric public utilities, an estimate of the amount of the REPS rider and the impact on the cost of fuel and fuel-related costs rider necessary to fully recover the projected costs; and

(ix) to the extent not already filed with the Commission, the electric power supplier shall, on or before September 1 of each year, file a renewable energy facility registration statement pursuant to Rule R8-66 for any facility it owns and upon which it is relying as a source of power or RECs in its REPS compliance plan.

(2) Each electric power supplier shall file its REPS compliance plan with the Commission on or before September 1 of each year.

(3) Any electric power supplier subject to Rule R8-60 shall file its REPS compliance plan as part of its integrated resource plan filing, and the

REPS compliance plan will be reviewed and approved pursuant to Rule R8-60. Approval of the REPS compliance plan as part of the integrated resource plan shall not constitute an approval of the recovery of costs associated with REPS compliance or a determination that the electric power supplier has complied with G.S. 62 133.8(b), (c), (d), (e), and (f).

(4) An REPS compliance plan filed by an electric power supplier not subject to Rule R8-60 shall be for information only.

(c) REPS compliance report.

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

(i) the sources, amounts, and costs of renewable energy certificates, by source, used to comply with G.S. 62-133.8(b), (c), (d), (e) and (f). Renewable energy certificates for energy efficiency may be based on estimates of reduced energy consumption through the implementation of energy efficiency measures, to the extent approved by the Commission;

(ii) the actual North Carolina retail sales and year-end number of customer accounts by customer class;

(iii) the current avoided cost rates and the avoided cost rates applicable to energy received pursuant to long-term power purchase agreements;

(iv) the actual total and incremental costs incurred during the calendar year to comply with G.S. 62-133.8(b), (c), (d), (e) and (f);

(v) a comparison of the actual incremental costs incurred during the calendar year to the per-account annual charges (in G.S. 62-133.8(g)(4)) applied to its total number of customer accounts as of December 31 of the previous calendar year;

(vi) the status of compliance with the requirements of G.S. 62-133.8(b), (c), (d), (e) and (f);

(vii) the identification of any renewable energy certificates or energy savings to be carried forward pursuant to G.S. 62-133.8(b)(2)f or (c)(2)f;

(viii) the dates and amounts of all payments made for renewable energy certificates; and

(ix) for electric membership corporations and municipal electric suppliers, reduced energy consumption achieved after January 1, 2008, through the implementation of a demand-side management program.

(2) Each electric public utility shall file its annual REPS compliance report, together with direct testimony and exhibits of expert witnesses, on the same date that it files (1) its cost recovery request under Rule R8-67(e), and

(2) the information required by Rule R8-55. The Commission shall consider each electric public utility's REPS compliance report at the hearing provided for in subsection (e) of this rule and shall determine whether the electric public utility has complied with G.S. 62-133.8(b), (d), (e) and (f). Public notice and deadlines for intervention and filing of additional direct and rebuttal testimony and exhibits shall be as provided for in subsection (e) of this rule.

(3) Each electric membership corporation and municipal electric supplier or their designated utility compliance aggregator shall file a verified REPS compliance report on or before September 1 of each year. The Commission may issue an order scheduling a hearing to consider the REPS compliance report filed by each electric membership corporation or municipal electric supplier, requiring public notice, and establishing deadlines for intervention and the filing of direct and rebuttal testimony and exhibits.

(4) In each electric power supplier's initial REPS compliance report, the electric power supplier shall propose a methodology for determining its cap on incremental costs incurred to comply with G.S. 62-133.8(b), (c), (d), (e) and (f) and fund research as provided in G.S. 62-133.8(h)(1), including a determination of year-end number of customer accounts. The proposed methodology may be specific to each electric power supplier, shall be based upon a fair and reasonable allocation of costs, and shall be consistent with G.S. 62-133.8(h). The electric power supplier may propose a different methodology that meets the above requirements in a subsequent REPS compliance report filing. For electric public utilities, this methodology shall also be used for assessing the per-account charges pursuant to G.S. 62-133.8(h)(5).

(5) In any year, an electric power supplier or other interested party may petition the Commission to modify or delay the provisions of G.S. 62-133.8(b), (c), (d), (e) and (f), in whole or in part. The Commission may grant such petition upon a finding that it is in the public interest to do so. If an electric power supplier is the petitioner, it shall demonstrate that it has made a reasonable effort to meet the requirements of such provisions. Retroactive modification or delay of the provisions of G.S. 62-133.8(b), (c), (d), (e) or (f) shall not be permitted. The Commission shall allow a modification or delay only with respect to the electric power supplier or group of electric power suppliers for which a need for a modification or delay has been demonstrated.

(6) A group of electric power suppliers may aggregate their REPS obligations and compliance efforts provided that all suppliers in the group are subject to the same REPS obligations and compliance methods as stated in either G.S. 133.8(b) or (c). If such a group of electric power suppliers fails to meet its REPS obligations, the Commission shall find and conclude that each supplier in the group, individually, has failed to meet its REPS obligations.

(d) Renewable energy certificates.

(1) Renewable energy certificates (whether or not bundled with electric power) claimed by an electric power supplier to comply with G.S. 62-133.8(b), (c), (d), (e) and (f) must have been earned after January 1, 2008; must have been purchased by the electric power supplier within three years of the date they

were earned; shall be retired when used for compliance; and shall not be used for any other purpose. A renewable energy certificate may be used to comply with G.S. 62-133.8(b), (c), (d), (e) and (f) in the year in which it is acquired or obtained by an electric power supplier or in any subsequent year; provided, however, that an electric public utility must use a renewable energy certificate to comply with G.S. 62-133.8(b), (d), (e) and (f) within seven years of cost recovery pursuant to subsection (e)(10) of this Rule.

(2) For any facility that uses both renewable energy resources and nonrenewable energy resources to produce energy, the facility shall earn renewable energy certificates based only upon the energy derived from renewable energy resources in proportion to the relative energy content of the fuels used.

(3) Renewable energy certificates earned by a renewable energy facility after the date the facility's registration is revoked by the Commission shall not be used to comply with G.S. 62-133.8(b), (c), (d), (e) and (f).

(4) Renewable energy certificates must be issued by, or imported into, the renewable energy certificate tracking system established in Rule R8-67(h) in order to be eligible RECs under G.S. 62-133.8.

(e) Cost recovery.

(1) For each electric public utility, the Commission shall schedule an annual public hearing pursuant to G.S. 62-133.8(h) to review the costs incurred by the electric public utility to comply with G.S. 62-133.8(b), (d), (e) and (f). The annual rider hearing for each electric public utility will be scheduled as soon as practicable after the hearing held by the Commission for the electric public utility under Rule R8-55.

(2) The Commission shall permit each electric public utility to charge an increment or decrement as a rider to its rates to recover in a timely manner the reasonable incremental costs prudently incurred to comply with G.S. 62-133.8(b), (d), (e) and (f). The cost of an unbundled renewable energy certificate, to the extent that it is reasonable and prudently incurred, is an incremental cost and has no avoided cost component.

(3) Unless otherwise ordered by the Commission, the test period for each electric public utility shall be the same as its test period for purposes of Rule R8-55.

(4) Rates set pursuant to this section shall be recovered during a fixed cost recovery period that shall coincide, to the extent practical, with the recovery period for the cost of fuel and fuel-related cost rider established pursuant to Rule R8-55.

(5) The incremental costs will be further modified through the use of an REPS experience modification factor (REPS EMF) rider. The REPS EMF rider will reflect the difference between reasonable and prudently incurred incremental costs and the revenues that were actually realized during the test period under the REPS rider then in effect. Upon request of the electric public utility, the Commission shall also incorporate in this determination the experienced

over-recovery or under-recovery of the incremental costs up to thirty (30) days prior to the date of the hearing, provided that the reasonableness and prudence of these costs shall be subject to review in the utility's next annual REPS cost recovery hearing.

(6) The REPS EMF rider will remain in effect for a fixed 12-month period following establishment and will carry through as a rider to rates established in any intervening general rate case proceedings.

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

(8) Each electric public utility shall follow deferred accounting with respect to the difference between actual reasonable and prudently-incurred incremental costs and related revenues realized under rates in effect.

(9) The incremental costs to be recovered by an electric public utility in any cost recovery period from its North Carolina retail customers to comply with G.S. 62-133.8(b), (d), (e), and (f) shall not exceed the per-account charges set forth in G.S. 62-133.8(h)(4) applied to the electric public utility's year-end number of customer accounts determined as of December 31 of the previous calendar year. These annual charges shall be collected through fixed monthly charges. Each electric public utility shall ensure that the incremental costs recovered under the REPS rider and REPS EMF rider during the cost recovery period, inclusive of gross receipts tax and the regulatory fee, from any given customer account do not exceed the applicable per-account charges set forth in G.S. 62-133.8(h)(4).

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

(11) Each electric public utility, at a minimum, shall submit to the Commission for purposes of investigation and hearing the information required for the REPS compliance report for the 12-month test period established in subsection (3) normalized, as appropriate, consistent with Rule R8-55, accompanied by supporting workpapers and direct testimony and exhibits of expert witnesses, and any change in rates proposed by the electric public utility at the same time that it files the information required by Rule R8-55.

(12) The electric public utility shall publish a notice of the annual hearing for two (2) successive weeks in a newspaper or newspapers having general circulation in its service area, normally beginning at least 30 days prior to the hearing, notifying the public of the hearing before the Commission pursuant to G.S. 62-133.8(h) and setting forth the time and place of the hearing.

(13) Persons having an interest in said hearing may file a petition to intervene setting forth such interest at least 15 days prior to the date of the hearing. Petitions to intervene filed less than 15 days prior to the date of the hearing may be allowed in the discretion of the Commission for good cause shown.

(14) The Public Staff and other intervenors shall file direct testimony and exhibits of expert witnesses at least 15 days prior to the hearing date. If a petition to intervene is filed less than 15 days prior to the hearing date, it shall be accompanied by any direct testimony and exhibits of expert witnesses the intervenor intends to offer at the hearing.

(15) The electric public utility may file rebuttal testimony and exhibits of expert witnesses no later than 5 days prior to the hearing date.

(16) The burden of proof as to whether the costs were reasonable and prudently incurred shall be on the electric public utility.

(f) Contracts with owners of renewable energy facilities.

(1) The terms of any contract entered into between an electric power supplier and a new solar electric facility or new metered solar thermal energy facility shall be of sufficient length to stimulate development of solar energy.

(2) Each electric power supplier shall include appropriate language in all agreements for the purchase of renewable energy certificates (whether or not bundled with electric power) prohibiting the seller from remarketing the renewable energy certificates being purchased by the electric power supplier.

(g) Metering of renewable energy facilities.

(1) Except as provided below, for the purpose of receiving renewable energy certificate issuance in NC-RETS, the electric power generated by a renewable energy facility shall be measured by an electric meter supplied by and read by an electric power supplier. Facilities whose renewable energy certificates are issued in a tracking system other than NC-RETS shall be subject to the requirements of the applicable state commission and/or tracking system.

(2) The electric power generated by an inverter-based solar photovoltaic (PV) system with a nameplate capacity of 10 kW or less may be estimated using generally accepted analytical tools.

(3) The electric power generated by a renewable energy facility interconnected on the customer's side of the utility meter at a customer's location may be measured by (1) an ANSI-certified electric meter not provided by an electric power supplier provided that the owner of the meter complies with the meter testing requirements of Rule R8-13, or (2) another industry-accepted, auditable and accurate metering, controls, and verification system. The data

provided by such meter or system may be read and self-reported by the owner of the renewable energy facility, subject to audit by the Public Staff. The owner of the meter shall retain for audit for 10 years the energy output data.

(4) Thermal energy produced by a combined heat and power system or solar thermal energy facility shall be the thermal energy recovered and used for useful purposes other than electric power production. The useful thermal energy may be measured by meter, or if that is not practicable, by other industry-accepted means that show what measurable amount of useful thermal energy the system or facility is designed and operated to produce and use. Renewable energy certificates shall be earned based on one certificate for every 3,412,000 British thermal units (Btu) of useful thermal energy produced. Meter devices, if used, shall be located so as to measure the actual thermal energy consumed by the load served by the facility. Thermal energy output that is used as station power or to process the facility's fuel is not eligible for RECs. Thermal energy production data, whether metered or estimated, shall be retained for audit for 10 years.

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

(1) Definitions

(i) "Balancing area operator" means an electric power supplier that has the responsibility to act as the balancing authority for a portion of the regional transmission grid, including maintaining the load-to-generation balance, accounting for energy delivered into and exported out of the area, and supporting interconnection frequency in real time.

(ii) "Multi-fuel facility" means a renewable energy facility that produces energy using more than one fuel type, potentially relying on a fuel that does not qualify for REC issuance in North Carolina.

(iii) "Participant" means a person or organization that opens an account in NC-RETS.

(iv) "Qualifying thermal energy output" is the useful thermal energy: (1) that is made available to an industrial or commercial process (net of any heat contained in condensate return and/or makeup water); (2) that is used in a heating application (e.g., space heating, domestic hot water heating); or (3) that is used in a space cooling application (i.e., thermal energy used by an absorption chiller).

(2) A renewable energy certificate (REC) tracking system, to be known as NC-RETS, is established by the Commission. NC-RETS shall issue, track, transfer and retire RECs. It shall calculate each electric power supplier's REPS obligation and report each electric power supplier's REPS accomplishments, consistent with the compliance report filed under Rule R8-67(c). NC-RETS shall be administered by a third-party vendor selected by the Commission. Only RECs issued by or imported into NC-RETS are qualifying RECs under G.S. 62-133.8.

(3) Each electric power supplier shall be a participant in NC-RETS and shall provide data to NC-RETS to calculate its REPS obligation and to

demonstrate its compliance with G.S. 62-133.8. An electric power supplier may select a utility compliance aggregator to participate in NC-RETS on its behalf and file REPS compliance plans and compliance reports, but the supplier shall nonetheless remain responsible for its own compliance. For reporting purposes, an electric power supplier or its utility compliance aggregator may aggregate the supplier's compliance obligations and accomplishments with those of other suppliers that are subject to the same obligations under G.S. 62-133.8.

(4) Each renewable energy facility or new renewable energy facility registered by the Commission under Rule R8-66 shall participate in NC-RETS in order to have RECs issued, or in another REC tracking system in order to have RECs issued and transferred into NC-RETS, but no facility's meter data for the same time period shall be used for simultaneous REC issuance in two such systems. Beginning June 1, 2011, renewable energy facilities registered in NC-RETS may only enter historic energy production data for REC issuance that goes back up to two years from the current date. Facilities that produce energy using one or more renewable energy resource(s) and another resource that does not qualify toward REPS compliance under G.S. 62-133.8 shall calculate on a monthly basis and provide to NC-RETS will issue RECs only for energy emanating from sources that qualify under G.S. 62-133.8.

(5) Each balancing area operator shall provide monthly electric generation production data to NC-RETS for renewable and new renewable energy facilities that are interconnected to the operator's electric transmission system. Such balancing area operator shall retain documentation verifying the production data for audit by the Public Staff.

(6) Each electric power supplier that has registered renewable energy facilities or new renewable energy facilities interconnected with its electric distribution system and that reads the electric generation production meters for those facilities shall provide monthly the facilities' energy output to NC-RETS, and shall retain for audit for 10 years that energy output data. Municipalities and electric membership corporations may elect to have the facilities' production data reported to NC-RETS and retained for audit by a utility compliance aggregator.

(7) A renewable energy facility or new renewable energy facility that produces thermal energy that qualifies for RECs shall report the facility's qualifying thermal energy output to NC-RETS at least every 12 months. A renewable energy facility or new renewable energy facility that reports its data pursuant to Rule R8-67(g)(3) shall report its energy output to NC-RETS at least every 12 months.

(8) The owner of an inverter-based solar photovoltaic system with a nameplate capacity of 10 kW or less may estimate its energy output using generally accepted analytical tools pursuant to Rule R8-67(g)(2). Such an owner, or its agent, of this kind of facility shall report the facility's energy output to NC-RETS at least every 12 months.

(9) All energy output and fuel data for multi-fuel facilities, including underlying documentation, calculations, and estimates, shall be retained for audit

for at least ten years immediately following the provision of the output data to NC-RETS or another tracking system, as appropriate.

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

(11) All Commission-approved costs of developing and operating NC-RETS shall be allocated among all electric power suppliers based upon their respective share of the total megawatt-hours of retail electricity sales in North Carolina in the previous calendar year. Each electric power supplier, or its utility compliance aggregator, shall, within 60 days of NC-RETS beginning operations, and by June 1 of each subsequent year, enter its previous year's retail electricity sales into NC-RETS, which sales will be used by NC-RETS to calculate each electric power supplier's REPS obligations and NC-RETS charges. NC-RETS shall update its billings beginning each July based on retail sales data for the previous calendar year. Such NC-RETS charges shall be deemed to be costs that are reasonable, prudent, incremental, and eligible for recovery through each electric public utility's annual rider established pursuant to G.S. 62-133.8(h).

(12) Each account holder in NC-RETS shall pay the NC-RETS administrator for service according to the following fee schedule:

(i) \$0.01 for each REC export to an account residing in a different REC tracking system.

(ii) \$0.01 for each REC retired for reasons other than compliance with G.S. 62-133.8.

(13) The Commission shall adopt NC-RETS Operating Procedures. The Commission shall establish an NC-RETS Stakeholder Group that shall meet from time to time and which may recommend changes to the NC-RETS Operating Procedures and NC-RETS.

(14) All data retention requirements of this Rule R8-67(h) may be accomplished via retention of electronic documents.

Rule R8-68. INCENTIVE PROGRAMS FOR ELECTRIC PUBLIC UTILITIES AND ELECTRIC MEMBERSHIP CORPORATIONS, INCLUDING ENERGY EFFICIENCY AND DEMAND-SIDE MANAGEMENT PROGRAMS

(a) Purpose. — The purpose of this rule is to establish guidelines for the application of G.S. 62-140(c) and G.S. 62-133.9 to electric public utilities and electric membership corporations that are consistent with the directives of those statutes and consistent with the public policy of this State as set forth in G.S. 62-2.

(b) Definitions.

(1) Unless listed below, the definitions of all terms used in this rule shall be as set forth in Rule R8-67(a), or if not defined therein, then as set forth in G.S. 62-3, G.S. 62-133.8(a) and G.S. 62-133.9(a).

(2) "Consideration" means anything of economic value paid, given, or offered to any person by an electric public utility or electric membership corporation (regardless of the source of the "consideration") including, but not limited to: payments to manufacturers, builders, equipment dealers, contractors including HVAC contractors, electricians, plumbers, engineers, architects, and/or homeowners or owners of multiple housing units or commercial establishments; cash rebates or discounts on equipment/appliance sales, leases, or service installation; equipment/ appliances sold below fair market value or below their cost to the electric public utility or electric membership corporation; low interest loans, defined as loans at an interest rate lower than that available to the person to whom the proceeds of the loan are made available; studies on energy usage; model homes; and payment of trade show or advertising costs. Excepted from the definition of "consideration" are favors and promotional activities that are de minimis and nominal in value and that are not directed at influencing fuel choice decisions for specific applications or locations.

(3) "Costs" include, but are not limited to, all capital costs (including cost of capital and depreciation expenses), administrative costs, implementation costs, participation incentives, and operating costs. "Costs" does not include utility incentives.

(4) "Electric public utility" means a person, whether organized under the laws of this State or under the laws of any other state or country, now or hereafter owning or operating in this State equipment or facilities for producing, transporting, distributing, or furnishing electric service to or for the public for consumption. For purposes of this rule, "electric public utility" does not include electric membership corporations.

(5) "Net lost revenues" means the revenue losses, net of marginal costs avoided at the time of the lost kilowatt-hour sale(s), or in the case of purchased power, in the applicable billing period, incurred by the electric public utility as the result of a new demand-side management or energy efficiency measure. Net lost revenues shall also be net of any increases in revenues resulting from any activity by the electric public utility that causes a customer to

increase demand or energy consumption, whether or not that activity has been approved pursuant to this Rule R8-68.

(6) "New demand-side management or energy efficiency measure" means a demand-side management or energy efficiency measure that is adopted and implemented on or after January 1, 2007, including subsequent changes and modifications to any such measure. Cost recovery for "new demand-side management measures" and "new energy efficiency measures" is subject to G.S. 62-133.9.

(7) "Participation incentive" means any consideration associated with a new demand-side management or energy efficiency measure.

(8) "Program" or "measure" means any electric public utility action or planned action that involves the offering of consideration.

(9) "Utility incentives" means incentives as described in G.S. 62-133.9(d)(2)a-c.

(c) Filing for Approval.

(1) Application of Rule.

(i) Prior to an electric public utility or electric membership corporation implementing any measure or program, the purpose or effect of which is to directly or indirectly alter or influence the decision to use the electric public utility's or electric membership corporation's service for a particular end use or to directly or indirectly encourage the installation of equipment that uses the electric public utility's or electric membership corporation's service, or any new or modified demand-side management or energy efficiency measure, the electric public utility or the electric membership corporation shall obtain Commission approval, regardless of whether the measure or program is offered at the expense of the shareholders, ratepayers, or third-party.

(ii) This requirement shall also apply to measures and programs that are administered, promoted, or funded by the electric public utility's or electric membership corporation's subsidiaries, affiliates, or unregulated divisions or businesses if the electric public utility or electric membership corporation has control over the entity offering or is involved in the measure or program and an intent or effect of the measure or program is to adopt, secure, or increase the use of the electric public utility's public utility services.

(iii) Any application for approval by an electric public utility or electric membership corporation of a measure or program under this rule shall be made in a unique sub-docket of the electric public utility's or electric membership corporation's docket number. (2) Filing Requirements. — Each application for the approval shall include:

(i) Cover Page. – The electric public utility or electric membership corporation shall attach to the front of an application a cover sheet generally describing:

a. the measure or program;

b. the consideration to be offered;

c. the anticipated total cost of the measure or program;

d. the source and amount of funding to be used; and

e. the proposed classes of persons to whom it will be offered.

(ii) Description. – The electric public utility or electric membership corporation shall provide a description of each measure and program, and include the following:

a. the program or measure's objective;

b. the duration of the program or measure;

c. the targeted sector and eligibility requirements;

d. examples of all communication materials to be used with the measure or program and the related cost for each program year;

e. the estimated number of participants;

f. the impact that each measure or program is expected to have on the electric public utility or electric membership corporation, its customer body as a whole, and its participating North Carolina customers; and

g. any other information the electric public utility or electric membership corporation believes is relevant to the application, including information on competition known by the electric public utility or the electric membership corporation.

(iii) Additionally, an electric public utility shall include or describe:

a. the measure's proposed marketing plan, including a description of market barriers and how the electric public utility intends to address them;

b. the total market potential and estimated market growth throughout the duration of the program;

c. the estimated summer and winter peak demand reduction by unit metric and in the aggregate by year;

d. the estimated energy reduction per appropriate unit metric and in the aggregate by year;

e. the estimated lost energy sales per appropriate unit metric and in the aggregate by year; and

f. the estimated load shape impacts.

Costs and Benefits. - The electric public utility or electric (iv) membership corporation shall provide the following information on the costs and benefits of each proposed measure or program: (a) the estimated total and per unit cost and benefit of the measure or program to the electric public utility or electric membership corporation, reported by type of benefit and expenditure (e.g., capital cost expenditures; administrative costs; operating costs; participation incentives, such as rebates and direct payments; and communications costs, and the costs of measurement and verification) and the planned accounting treatment for those costs and benefits; (b) the type, the maximum and minimum amount of participation incentives to be made to any party, and the reason for any participation incentives and other consideration and to whom they will be offered, including schedules listing participation incentives and other consideration to be offered; and (c) service limitations or conditions planned to be imposed on customers who do not participate in the measure. With respect to communications costs, the electric public utility or electric membership corporation shall provide detailed cost information on communications materials related to each proposed measure or program. Such costs shall be included in the Commission's consideration of the total cost of the measure or program and whether the total cost of the measure or program is reasonable in light of the benefits.

(v) Cost-Effectiveness Evaluation. — The electric public utility or electric membership corporation shall provide the economic justification for each proposed measure or program, including the results of all cost-effectiveness tests. Cost-effectiveness evaluations performed by the electric public utility or electric membership corporation should be based on direct or quantifiable costs and benefits and should include, at a minimum, an analysis of the Total Resource Cost Test, the Participant Test, the Utility Cost Test, and the Ratepayer Impact Measure Test. In addition, an electric public utility shall describe the methodology used to produce the impact estimates as well as, if appropriate, methodologies considered and rejected in the interim leading to the final model specification. (vi) Commission Guidelines Regarding Incentive Programs. — The electric public utility or electric membership corporation shall provide the information necessary to comply with the Commission's Revised Guidelines for Resolution of Issues Regarding Incentive Programs, issued by Commission Order on March 27, 1996, in Docket No. M-100, Sub 124, set out as an Appendix to Chapter 8 of these rules.

(vii) Integrated Resource Plan. — When seeking approval of a new demand-side management or new energy efficiency measure, the electric public utility or electric membership corporation shall explain in detail how the measure is consistent with the electric public utility's or electric membership corporation's integrated resource plan filings pursuant to Rule R8-60.

(viii) Other. — Any other information the electric public utility or electric membership corporation believes relevant to the application, including information on competition known by the electric public utility or the electric membership corporation.

(3) Additional Filing Requirements. — In addition to the information listed in subsection (c)(2), an electric public utility filing for approval of a new or modified demand-side management or energy efficiency measure shall provide the following:

(i) Costs and Benefits. – The electric public utility shall describe:

a. any costs incurred or expected to be incurred in adopting and implementing a measure or program to be considered for recovery through the annual rider under G.S. 62-133.9;

b. estimated total costs to be avoided by the measure by appropriate capacity, energy and measure unit metric and in the aggregate by year;

c. estimated participation incentives by appropriate capacity, energy, and measure unit metric and in the aggregate by year;

d. how the electric public utility proposes to allocate the costs and benefits of the measure among the customer classes and jurisdictions it serves;

e. the capitalization period to allow the utility to recover all costs or those portions of the costs associated with a new program or measure to the extent that those costs are intended to produce future benefits as provided in G.S. 62-133.9(d)(1).

f. The electric public utility shall also include the estimated and known costs of measurement and verification activities pursuant to the Measurement and Verification Reporting Plan described in paragraph (ii).

(ii) Measurement and Verification Reporting Plan for New Demand-Side Management and Energy Efficiency Measures. — The electric public utility shall be responsible for the measurement and verification of energy and peak demand savings and may use the services of an independent third party for such purposes. The costs of implementing the measurement and verification process may be considered as operating costs for purposes of Commission Rule R8-69. In addition, the electric public utility shall:

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

b. provide a schedule for reporting the savings to the Commission;

c. describe the methodologies used to produce the impact estimates, as well as, if appropriate, the methodologies it considered and rejected in the interim leading to final model specification; and

d. identify any third party and include all of the costs of that third party, if the electric public utility plans to utilize an independent third party for purposes of measurement and verification.

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

(iv) Tariffs or rates. — The electric public utility shall provide proposed tariffs or modifications to existing tariffs that will be required to implement each measure or program.

Utility Incentives. - When seeking approval of new (v)demand-side management and energy efficiency measures, the electric public utility shall indicate whether it will seek to recover any utility incentives, including, if appropriate, net lost revenues, in addition to its costs. If the electric public utility proposes recovery of utility incentives related to the proposed new demand-side management or energy efficiency measure, it shall describe the utility incentives it desires to recover and describe how its measurement and verification reporting plan will demonstrate the results achieved by the proposed measure. If the electric public utility proposes recovery of net lost revenues, it shall describe estimated net lost revenues by appropriate capacity, energy and measure unit metric and in the aggregate by year. If the electric public utility seeks recovery of utility incentives, including net lost revenues, apart from its recovery of its costs under G.S. 62-133.9, it shall file estimates of the utility incentives and the net lost revenues associated with the proposed measure for each year of the proposed recovery. If the electric public utility seeks only the recovery of net lost revenues apart from its recovery of combined costs and utility incentives, it shall file estimates of net lost revenues for each year of the proposed recovery period.

(d) Procedure.

(1) Automatic Tariff Suspension. – If an electric public utility files a proposed tariff or tariff amendment in connection with an application for approval of a measure or program, the tariff filing shall be automatically suspended pursuant to G.S. 62-134 pending investigation, review, and decision by the Commission.

(2) Service and Response. - The electric public utility or electric membership corporation filing for approval of a measure or program shall serve a copy of its filing on the Public Staff; the Attorney General; the natural gas utilities, electric public utilities, and electric membership corporations operating in the filing electric public utility's or electric membership corporation's certified territory; and any other party that has notified the electric public utility or electric membership corporation in writing that it wishes to be served with copies of all filings. If a party consents, the electric public utility or electric membership corporation may serve it with electronic copies of all filings. Those served, and others learning of the application, shall have thirty (30) days from the date of the filing in which to petition for intervention pursuant to R1-19, file a protest pursuant to Rule R1-6, or file comments on the proposed measure or program. In comments, any party may recommend approval or disapproval of the measure or program or identify any issue relative to the program application that it believes requires further investigation. The filing electric public utility or electric membership corporation shall have the opportunity to respond to the petitions, protests, or comments within ten (10) days of their filing. If any party raises an issue of material fact, the Commission shall set the matter for hearing. The Commission may determine the scope of this hearing.

(3) Notice and Schedule. — If the application is set for hearing, the Commission shall require notice, as it considers appropriate, and shall establish a procedural schedule for prefiled testimony and rebuttal testimony after a discovery period of at least 45 days. Where possible, the hearing shall be held within ninety (90) days from the application filing date.

(e) Scope of Review. — In determining whether to approve in whole or in part a new measure or program or changes to an existing measure or program, the Commission may consider any information it determines to be relevant, including any of the following issues:

(1) Whether the proposed measure or program is in the public interest and benefits the electric public utility's or electric membership corporation's overall customer body;

(2) Whether the proposed measure or program unreasonably discriminates among persons receiving or applying for the same kind and degree of service;

(3) Evidence of consideration or compensation paid by any competitor, regulated or unregulated, of the electric public utility or electric membership corporation to secure the installation or adoption of the use of such competitor's services;

(4) Whether the proposed measure or program promotes unfair or destructive competition or is inconsistent with the public policy of this State as set forth in G.S. 62-2 and G.S. 62-140; and

(5) The impact of the proposed measure or program on peak loads and load factors of the filing electric public utility or electric membership corporation, and whether it encourages energy efficiency.

(f) Cost Recovery for New Measures. – Approval of a program or measure under Commission Rule R8-68 does not constitute approval of rate recovery of the costs of the program or measure. With respect to new demand-side management and energy efficiency measures, the costs of those new measures, approved by application of this rule, that are found to be reasonable and prudently incurred shall be recovered through the annual rider described in G.S. 62-133.9 and Rule R8-69. The Commission may consider in the annual rider proceeding whether to approve the inclusion of any utility incentive pursuant to G.S. 62-133.9(d)(2)a.-c. in the annual rider.

Rule R8-69. COST RECOVERY FOR DEMAND-SIDE MANAGEMENT AND ENERGY EFFICIENCY MEASURES OF ELECTRIC PUBLIC UTILITIES

(a) Definitions.

(1) Unless listed below, the definitions of all terms used in this rule shall be as set forth in Rules R8-67 and R8-68, or if not defined therein, then as set forth in G.S. 62-133.8(a) and G.S. 62-133.9(a).

(2) "DSM/EE rider" means a charge or rate established by the Commission annually pursuant to G.S. 62-133.9(d) to allow the electric public utility to recover all reasonable and prudent costs incurred in adopting and implementing new demand-side management and energy efficiency measures after August 20, 2007, as well as, if appropriate, utility incentives, including net lost revenues.

(3) "Large commercial customer" means any commercial customer that has an annual energy usage of not less than 1,000,000 kilowatt-hours (kWh), measured in the same manner as the electric public utility that serves the commercial customer measures energy for billing purposes.

(4) "Rate period" means the period during which the DSM/EE rider established under this rule will be in effect. For each electric public utility, this period will be the same as the period during which the rider established under Rule R8-55 is in effect.

(5) "Test period" shall be the same for each public utility as its test period for purposes of Rule R8-55, unless otherwise ordered by the Commission.

(b) Recovery of Costs.

(1) Each year the Commission shall conduct a proceeding for each electric public utility to establish an annual DSM/EE rider. The DSM/EE rider shall consist of a reasonable and appropriate estimate of the expenses expected to be incurred by the electric public utility, during the rate period, for the purpose of adopting and implementing new demand-side management and energy

efficiency measures previously approved pursuant to Rule R8-68. The expenses will be further modified through the use of a DSM/EE experience modification factor (DSM/EE EMF) rider. The DSM/EE EMF rider will reflect the difference between the reasonable expenses prudently incurred by the electric public utility during the test period for that purpose and the revenues that were actually realized during the test period under the DSM/EE rider then in effect. Those expenses approved for recovery shall be allocated to the North Carolina retail jurisdiction consistent with the system benefits provided by the new demand-side management and energy efficiency measures and shall be assigned to customer classes in accordance with G.S. 62-133.9(e) and (f).

(2) Upon the request of the electric public utility, the Commission shall also incorporate the experienced over-recovery or under-recovery of costs up to thirty (30) days prior to the date of the hearing in its determination of the DSM/EE EMF rider, provided that the reasonableness and prudence of these costs shall be subject to review in the utility's next annual DSM/EE rider hearing.

(3) Pursuant to G.S. 62-130(e), any over-collection of reasonable and prudently incurred costs to be refunded to an electric public utility's customers through operation of the DSM/EE EMF rider shall include an amount of interest, at such rate as the Commission determines to be just and reasonable, not to exceed the maximum statutory rate. The beginning date for measurement of such interest shall be the effective date of the DSM/EE EMF rider in each annual proceeding, unless otherwise determined by the Commission.

(4) The burden of proof as to whether the costs were reasonably and prudently incurred shall be on the electric public utility.

(5) Any costs incurred for adopting and implementing measures that do not constitute new demand-side management or energy efficiency measures are ineligible for recovery through the annual rider established in G.S. 62-133.9.

Except as provided in (c)(3) of this rule, each electric public utility (6) may implement deferral accounting for costs considered for recovery through the annual rider. At the time the Commission approves a new demand-side management or energy efficiency measure under Rule R8-68, the electric public utility may defer costs of adopting and implementing the new measure in accordance with the Commission's approval order under Rule R8-68. Subject to the Commission's review, the electric public utility may begin deferring the costs of adopting and implementing new demand-side management or energy efficiency measures six (6) months prior to the filing of its application for approval under Rule R8-68, except that the Commission may consider earlier deferral of development costs in exceptional cases, where such deferral is necessary to develop an energy efficiency measure. Deferral accounting, however, for any administrative costs, general costs, or other costs not directly related to a new demand-side management or energy efficiency measure must be approved prior to deferral. The balance in the deferral account, net of deferred income taxes, may accrue a return at the net-of-tax rate of return approved in the electric public utility's most recent general rate proceeding. The return so calculated will be adjusted in any rider calculation to reflect necessary recoveries of income taxes.

This return is not subject to compounding. The accrual of such return of on any under-recovered or over-recovered balance set in an annual proceeding for recovery or refund through a DSM/EE EMF rider shall cease as of the effective date of the DSM/EE EMF rider in that proceeding, unless otherwise determined by the Commission. However, deferral accounting of costs shall not affect the Commission's authority under this rule to determine whether the deferred costs may be recovered.

(c) Utility Incentives.

(1) With respect to a new demand-side management or energy efficiency measure previously approved under Rule R8-68, the electric public utility may, in its annual filing, apply for recovery of any utility incentives, including, if appropriate, net lost revenues, identified in its application for approval of the measure. The Commission shall determine the appropriate ratemaking treatment for any such utility incentives.

(2) When requesting inclusion of a utility incentive in the annual rider, the electric public utility bears the burden of proving its calculations of those utility incentives and the justification for including them in the annual rider, either through its measurement and verification reporting plan or through other relevant evidence.

(3) An electric public utility shall not be permitted to implement deferral accounting or the accrual of a return for utility incentives unless the Commission approves an annual rider that provides for recovery of an integrated amount of costs and utility incentives. In that instance, the Commission shall determine the extent to which deferral accounting and the accrual of a return will be allowed.

(d) Special Provisions for Industrial or Large Commercial Customers.

(1) Pursuant to G.S. 62-133.9(f), any industrial customer or large commercial customer may notify its electric power supplier that: (i) it has implemented or, in accordance with stated, quantifiable goals, will implement alternative demand-side management or energy efficiency measures; and (ii) it elects not to participate in demand-side management or energy efficiency measures for which cost recovery is allowed under G.S. 62-133.9. Any such customer shall be exempt from any annual rider established pursuant to this rule after the date of notification.

(2) At the time the electric public utility petitions for the annual rider, it shall provide the Commission with a list of those industrial or large commercial customers that have opted out of participation in the new demand-side management or energy efficiency measures. The electric public utility shall also provide the Commission with a listing of industrial or large commercial customers that have elected to participate in new measures after having initially notified the electric public utility that it declined to participate.

(3) Any customer that opts out but subsequently elects to participate in a new demand-side management or energy efficiency measure or program loses the right to be exempt from payment of the rider for five years or the life of the measure or program, whichever is longer. For purposes of this subsection, "life of the measure or program" means the capitalization period approved by the Commission to allow the utility to recover all costs or those portions of the costs associated with a program or measure to the extent that those costs are intended to produce future benefits as provided in G.S. 62-133.9(d)(1).

(e) Annual Proceeding.

(1) For each electric public utility, the Commission shall schedule an annual rider hearing pursuant to G.S. 62-133.9(d) to review the costs incurred by the electric public utility in the adoption and implementation of new demand-side management and energy efficiency measures during the test period, the revenues realized during the test period through the operation of the annual rider, and the costs expected to be incurred during the rate period and shall establish annual DSM/EE and DSM/EE EMF riders to allow the electric public utility to recover all costs found by the Commission to be recoverable. The Commission may also approve, if appropriate, the recovery of utility incentives, including net lost revenues, pursuant to G.S. 62-133.9(d)(2) in the rider.

(2) The annual rider hearing for each electric public utility will be scheduled as soon as practicable after the hearing held by the Commission for the electric public utility under Rule R8-55. Each electric public utility shall file its application for recovery of costs and appropriate utility incentives at the same time that it files the information required by Rule R8-55.

(3) The DSM/EE EMF rider will remain in effect for a fixed 12-month period following establishment and will continue as a rider to rates established in any intervening general rate case proceeding.

(f) Filing Requirements and Procedure.

(1) Each electric public utility shall submit to the Commission all of the following information and data in its application:

(i) Projected North Carolina retail monthly kWh sales for the rate period.

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

a. total expenses expected to be incurred during the rate period in the aggregate and broken down by type of expenditure, per appropriate capacity, energy and measure unit metric and the proposed jurisdictional allocation factors;

b. total costs that the utility does not expect to incur during the rate period as a direct result of the measure in the aggregate and broken down by type of cost, per appropriate capacity, energy and measure unit metric, and the proposed jurisdictional allocation factors, as well as any changes in the estimated future amounts since last filed with the Commission;

c. a description of the measurement and verification activities to be conducted during the rate period, including their estimated costs;

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

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

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

a. total expenses for the test period in the aggregate and broken down by type of expenditure, per appropriate capacity, energy and measure unit metric and the proposed jurisdictional allocation factors;

b. total costs that the utility did not incur for the test period as a direct result of the measure in the aggregate and broken down by type of cost, per appropriate capacity, energy and measure unit metric, and the proposed jurisdictional allocation factors, as well as any changes in the estimated future amounts since last filed with the Commission;

c. a description of, the results of, and the costs of all measurement and verification activities conducted in the test period;

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

e. total energy reduction in the aggregate and per appropriate measure unit metric, as well as any changes in the estimated future amounts since last filed with the Commission;

f. a discussion of the findings and the results of the program or measure;

g. evaluations of event-based programs including the date, weather conditions, event trigger, number of customers notified and number of customers enrolled; and

h. a comparison of impact estimates presented in the measure application from the previous year, those used in reporting for previous measure years, and an explanation of significant differences in the impacts reported and those previously found or used.

(iv) For each measure for which recovery of utility incentives is requested, a detailed explanation of the method proposed for calculating those utility incentives, the actual calculation of the proposed utility incentives, and the proposed method of providing for their recovery and true-up through the annual rider. If recovery of net lost revenues is requested, the total net lost kWh sales and net lost revenues per appropriate capacity, energy, and program unit metric and in the aggregate for the test period, and the proposed jurisdictional allocation factors, as well as any changes in estimated future amounts since last filed with the Commission.

(v) Actual revenues produced by the DSM/EE rider and the DSM/EE EMF rider established by the Commission during the test period and for all available months immediately preceding the rate period.

(vi) The requested DSM/EE rider and DSM/EE EMF rider and the basis for their determination.

(vii) Projected North Carolina retail monthly kWh sales for the rate period for all industrial and large commercial accounts, in the aggregate, that are not assessed the rider charges as provided in this rule.

(viii) All workpapers supporting the calculations and adjustments described above.

(2) Each electric public utility shall file the information required under this rule, accompanied by workpapers and direct testimony and exhibits of expert witnesses supporting the information filed in this proceeding, and any change in rates proposed by the electric public utility, by the date specified in subdivision (e)(2) of this rule. An electric public utility may request a rider lower than that to which its filed information suggests that it is entitled.

(3) The electric public utility shall publish a notice of the annual hearing for two (2) successive weeks in a newspaper or newspapers having general circulation in its service area, normally beginning at least thirty (30) days prior to the hearing, notifying the public of the hearing before the Commission pursuant to G.S. 62-133.9(d) and setting forth the time and the place of the hearing.

(4) Persons having an interest in any hearing may file a petition to intervene at least 15 days prior to the date of the hearing. Petitions to intervene filed less than 15 days prior to the date of the hearing may be allowed in the discretion of the Commission for good cause shown.

(5) The Public Staff and other intervenors shall file direct testimony and exhibits of expert witnesses at least 15 days prior to the hearing date. If a petition to intervene is filed less than 15 days prior to the hearing date, it shall be accompanied by any direct testimony and exhibits of expert witnesses the intervenor intends to offer at the hearing.

(6) The electric public utility may file rebuttal testimony and exhibits of expert witnesses no later than 5 days prior to the hearing date.

CHAPTER 8. APPENDIX.

REVISED GUIDELINES FOR RESOLUTION OF ISSUES REGARDING INCENTIVE¹ PROGRAMS

(1) To obtain Commission approval of a residential or commercial program involving incentives per Rule R1-38 [now Rule R6-95 or R8-68], the sponsoring utility must demonstrate that the program is cost effective for its ratepayers.

(a) Maximum incentive payments to any party must be capable of being determined from an examination of the applicable program.

(b) Existing approved programs are grandfathered. However, utilities shall file a listing of existing approved programs subject to these guidelines, including applicable tariff sheets, and amount and type of incentives involved in each program or procedure for calculating such incentives in each program, all within 60 days after approval of these guidelines.

(c) Utilities shall file a description of any new program or of a change in an existing program, including applicable tariff sheets, and amount and type of incentives involved in each program or procedure for calculating such incentives in each program, all at least 30 days prior to changing or introducing the program.

(d) The matter of the relative efficiency of electricity versus natural gas under various scenarios (space heating alone, space heating plus A/C, etc.) cannot now be resolved. A better approach at this time would be to determine the acceptability of incentive programs herein based on the energy efficiency of electricity alone or of natural gas alone, as applicable.

(e) The criteria for determining whether or not to approve an electric program pursuant to G.S. 62-140(c) should not include consideration of the impact of an electric program on the sales of natural gas, or vice versa.

(f) Approval of a program pursuant to Commission Rule R1-38 [now Rule R6-95 or R8-68] does not constitute approval of rate recovery of the costs of the program. The appropriateness of rate recovery shall be evaluated in general rate cases or similar proceedings.

(2) If a program involves an incentive per Rule R1-38 [now Rule R6-95 or R8-68] and the incentive affects the decision to install or adopt natural gas service or electric service in the residential or commercial market, there shall be a rebuttable presumption that the program is promotional in nature.

¹ All incentives referenced in these Revised Guidelines are participation incentives as now defined in Rule R8-68(b)(7).

(a) If the presumption that a program is promotional is not successfully rebutted, the cost of the incentive may not be recoverable from the ratepayers unless the Commission finds good cause to do so.

(b) If the presumption that a program is promotional is successfully rebutted, the cost of the incentive may be recoverable from the ratepayers. The cost shall not be disallowed in a future proceeding on the grounds that the program is primarily designed to compete with other energy suppliers. The amount of any recovery shall not exceed the difference between the cost of installing equipment and/or constructing a dwelling to current state/federal energy efficiency standards and the more stringent energy efficiency requirements of the program, to the extent found just and reasonable by the Commission.

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

(3) If a program involves an incentive paid to a third party builder (residential or commercial), the builder shall be advised by the sponsoring utility that the builder may receive the incentive on a per structure basis without having to agree to: (1) a minimum number or percentage of all-gas or all-electric structures to be built in a given subdivision development or in total; or (2) the type of any given structure (gas or electric) to be built in a given subdivision development.

(a) Electric and gas utilities may continue to promote and pay incentives for all-electric and all-gas structures respectively, provided such programs are approved by the Commission.

(b) A builder shall be advised by the sponsoring utility of the availability of natural gas or electric alternatives, as appropriate.

(c) A builder receiving incentives shall not be required to advertise that the builder is exclusively an all-gas or all-electric builder for either a particular subdivision or in general.

(4) The promotional literature for any program offering energy-efficiency mortgage discounts shall explain that the structures financed under the program need not be all-electric or all-gas.

(5) Duke's proposed Food Service Program shall be modified to include a definition of qualifying equipment and of conventional equipment, and is subject to approval in accordance with guideline number 1 above.

(a) The nature or amount of incentive contained in each program encouraging the installation of commercial appliances (electric or gas) that use the sponsoring utility's energy product, such as Duke's Food Service Program, shall be unaffected by the availability or use of alternate fuels in the applicable customer's facility.

(b) Commercial clients (builders, customers, etc.) who are offered incentives for installation of appliances shall be advised by the sponsoring utility of the availability of natural gas or electric alternatives, as appropriate.

(6) Rates, rate design issues, and terms and conditions of service approved by the Commission are not subject to these guidelines.

(7) Pending applications involving incentive programs are subject to these guidelines.

Application to Register a Renewable Energy Facility or New Renewable Energy Facility Pursuant to Rule R8-66

(Applicants should consult Rule R8-66 while completing this form in order to ensure they provide sufficient information.)

Facility name:	
Full and correct name of the owner of the facility:	
Business address:	
Electronic mailing address:	
Telephone number:	
Owner's agent for purposes of this application, if applicable:	
Agent's business address:	
Agent's electronic mailing address:	
Agent's telephone number:	
The owner is:	Individual Partnership Corporation (including LLC)
If a corporation, state and date of incorporation.	State Date

APPENDIX C

If a corporation that is incorporated outside of North Carolina, is it domesticated in North Carolina?	Yes	No
If a partnership, the name and business address of each general partner. (Add additional sheets if necessary.)		
Nature of the renewable energy facility:		
1. Describe the facility, including its technology, and the source of its power and fuel(s). Thermal facilities should describe how its host uses the facility's thermal energy output. (Add additional sheets if necessary.)		
2. Whether it produces electricity, useful thermal energy, or both.		
 Nameplate capacity in kW/MW (AC) and/or maximum Btu per hour for thermal facilities. 		
The location of the facility set forth in terms of local highways, streets, rivers, streams, or other generally known local landmarks. Attach a map, such as a county road map, with the location indicated on the map.		

APPENDIX C

Site ownership:		
 Is the site owner other than the facility owner? If yes, who is the site owner? 		
2. What is the facility owner's legal interest in the site?		
List the approvals that are required to build and/or operate this facility, and attach copies of those that have been obtained. Wind facilities with multiple turbines, where each turbine is licensed separately, may provide copies of approvals for one such turbine but shall add an attestation that approvals for all of the turbines are available for inspection.		
1. Federal permits and licenses:		
2. State permits and licenses:		
 Exemptions required for construction and operation of the facility: 		
4. Statement of whether each has been obtained or applied for (attach copy of those that have been obtained with this application):		
If the facility has been placed into service, on what date did the facility begin operating?		
If the facility is not yet operating, on what date is the facility projected to be placed into service?		

If the facility is already operating, what is the amount of energy produced by the facility, net of station use, for the most recent 12-month or calendar-year period? Energy production data for a shorter time period is acceptable for facilities that have not yet operated for a full year.	
What entity does (or will) read the facility's energy production meter(s) for the purpose of issuing renewable energy certificates?	
For thermal energy facilities, describe the method to be used to determine the facility's thermal energy production, in BTUs, that is eligible for REC issuance.	
Does the facility participate in a REC tracking system and if so, which one? If not, which tracking system will the facility participate in for the purpose of REC issuance?	
If this facility has already been the subject of a proceeding or submittal before the Commission, such as a Report of Proposed Construction or a Certificate of Public Convenience and Necessity, please provide the Commission Docket Number, if available.	

The owner of the renewable energy facility shall provide the following attestations, signed and notarized:

1. Yes No	I certify that the facility is in substantial compliance with all federal and state laws, regulations, and rules for the protection of the environment and conservation of natural resources.
2. Yes No	I certify that the facility satisfies the requirements of G.S. 62-133.8(a)(5) or (7) as a: renewable energy facility, or new renewable energy facility, and that the facility will be operated as a: renewable energy facility, or new renewable energy facility.
3. Yes No	I certify that 1) my organization is not simultaneously under contract with NC GreenPower to sell our RECs emanating from the same electricity production being tracked in NC-RETS; and 2) any renewable energy certificates (whether or not bundled with electric power) sold to an electric power supplier to comply with G.S. 62-133.8 have not, and will not, be remarketed or otherwise resold for any other purpose, including another renewable energy portfolio standard or voluntary purchase of renewable energy certificates in North Carolina (such as NC GreenPower) or any other state or country, and that the electric power associated with the certificates will not be offered or sold with any representation that the power is bundled with renewable energy certificates.
4. Yes No	I certify that I consent to the auditing of my organization's books and records by the Public Staff insofar as those records relate to transactions with North Carolina electric power suppliers, and agree to provide the Public Staff and the Commission access to our books and records, wherever they are located, and to the facility.
5. Yes No	I certify that the information provided is true and correct for all years that the facility has earned RECs for compliance with G.S. 62-133.8.
6. Yes No	I certify that I am the owner of the renewable energy facility or am duly authorized to act on behalf of the owner for the purpose of this filing.
(Signature)	(Title)

(Name - Printed or Typed)

(Date)

VERIFICATION

STATE OF _____ COUNTY OF _____

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

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

My Commission Expires: _____

Signature of Notary Public

Name of Notary Public – Typed or Printed

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

APPENDIX D



NORTH CAROLINA RENEWABLE ENERGY TRACKING SYSTEM INTERIMOPERATING PROCEDURES

June 30 January 31, 201 10

Disclaimer: This document is intended to guide the operations of NC-RETS, both the users of the system and its administrator, APX. It is intended to be consistent with the NC Utilities Commission's rules implementing North Carolina's Renewable Energy and Energy Efficiency Portfolio Standard. Please contact Commission Staff if you believe there is a conflict between these Operating Procedures and the Commission's rules. NC-RETS users can propose changes to these procedures by participating in the NC-RETS Stakeholders Group.

Table of Contents

Gl	ossa	ary	iii
1	Int	troduction	1
2	N	C-RETS User Registration	1
		Participation in NC-RETS Establishing an Account. Deposits to Active Sub-Accounts. Transfers from Active Sub-Accounts. Retirement Sub-Accounts. Compliance Sub-Accounts. Transfers between Accounts. Compatible Tracking Systems. 8.1 Imports from other Tracking Systems. 8.2 Exports to other Tracking Systems.	2 5 6 6 7 7 8
3	Ac	ccess to Accounts and Confidentiality	9
	3.2	Account Access Levels of Account Access 2.1 Account Holder – Supervisor 2.2 Account Holder – View Only Confidentiality	10 10 10
4	Pr	oject Registration	10
	4.1 4.2 4.3 4.4 4.5 4.6 4.7	Registering a Project Multi-fuel Renewable Energy Facility Project Verification of Static Data Submitted During Project Registration Updating Static Data Misrepresentation of Static Information Terminating a Project's Participation in NC-RETS Changing the Account (Owner) with which a Project is Associated	12 12 13 13 14
5	Dy	namic Data in NC-RETS – Generation Data – Role of Qualified Reporting	
Er	ntity.		15
	5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8	Qualified Reporting Entity (QRE) Guidelines Generation Data Requirements Measurement of Generation and Adjustments Prior Period Adjustments Notification of Adjustments Data Collection Procedure Special Requirements for Self-Reporting Generators Only Generation Activity Log	17 19 19 20 20 20

APPENDIX D



5.9 Multi-fuel Generation Projects2	
5.9.1 Allocating Output for Each Fuel Source2	22
5.10 Energy Efficiency Data Requirements2	23
6 Creation of Certificates	23
6.1 Certificate Creation	23
6.2 Process and Timeline for Certificate Creation	<u>2</u> 4
6.3 Certificate Creation for Accumulated Generation2	25
6.4 Data Fields Carried on Each Certificate2	25
7 Certificate Errors and Correction 2	27
7.1 Generation Data Validity Check2	27
7.2 Certificate Errors Discovered After Certificate Issuance	
8 NC-RETS Compliance Requirements	27
9 Public Reports	29
9.1 Account Holder Reports	
10 Data Security	31
Appendix A: Account Holder Registration Process	32
Appendix B: Project Registration Process	34
Appendix C: Documentation Requirements for Multi-fuel Generation Projects	37
Appendix D: NC-RETS Generator Fuel Types	38
Appendix E: List of Referenced Documents	39
Appendix F: Compatible Tracking Systems 4	10
Appendix G: Protocol For Imports From ERCOT4	1

Glossary

Account: An Account is the vehicle by which an individual or an organization participates in NC-RETS and uses the system to upload Renewable Energy Facility production data, or to create, hold, track and/or retire RECs in Sub-accounts, or to audit an Electric Power Supplier's compliance with North Carolina's Portfolio Standard. There are four Account types in NC-RETS: NC Electric Power Supplier, General, Qualified Reporting Entity, and Program Auditor.

Account ID: A unique NC-RETS identifier for an Account that is assigned by NC-RETS when the NC-RETS Administrator approves the Account in NC-RETS.

Account Holder: An Account Holder is a person or organization that has registered with NC-RETS and has established an Account in order to own RECs in NC-RETS, provide Renewable Energy Facility production data to NC-RETS, or audit a compliance program within NC-RETS.

Account Manager: An Account Manager is the administrator for an Account Holder's NC-RETS Account, having the ability to, among other things, setup and manage additional logins and login privileges for other Users, typically other employees of the same organization.

Active Certificates: An Active Certificate is a Renewable Energy Certificate or Energy Efficiency Certificate that is held in an Active Sub-account and that has not yet been retired. Such Certificates may be traded, transferred, exported or retired at the discretion of the Account Holder of the Active Sub-account, except that Energy Efficiency Certificates can be used for compliance with North Carolina's Portfolio Standard only by the Electric Power Supplier that produced them or by a group of affiliated Electric Power Suppliers using the same Utility Compliance Aggregator.

Active Sub-account: An Active Sub-account is a Sub-account of an Account Holder's Account and is the holding place for all Active Certificates. If the Account Holder is the owner of a Renewable Energy Facility, or is the Responsible Party of a Renewable Energy Facility, their Active Sub-account will be the first point of deposit for any Certificates created that are associated with the Project ID number, unless the Certificate is subject to a Forward Certificate Transfer. Similarly, if the Account Holder is an Electric Power Supplier that operates an energy efficiency program, the related Certificates are created in an Active Sub-account. An Active Sub-account may be associated with one or more Projects.

Balancing Authority: The entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority area,

and supports interconnection frequency in real time. Duke Energy and Progress Energy are the Balancing Authorities for most of North Carolina. PJM is the Balancing Authority for Dominion North Carolina Power's service area.

Bulletin Board Sub-account: The Bulletin Board Sub-account is an Active Sub-account of an Account Holder's Account and is the holding place for Active Certificates that the Account Holder has posted for sale on the Bulletin Board.

Certificate: NC-RETS issues two kinds of Certificates: Renewable Energy Certificates (RECs), and Energy Efficiency Certificates (EECs). Unless otherwise specified by statute, rule or NCUC order, NC-RETS will issue one Certificate for each MWh of energy produced by a Renewable Energy Facility or saved via an Electric Power Supplier-sponsored energy efficiency or demand-side management program. Certificates from Renewable Energy Facilities that are Multi-fuel Facilities shall be issued pursuant to Section 4.2.

Commission: The Commission is the North Carolina Utilities Commission.

Compliance Sub-account: A Sub-account used by an Electric Power Supplier or Utility Compliance Aggregator to demonstrate compliance with a specific year of Portfolio Standard obligation(s). The Account Holder places Certificates into the Compliance Sub-account, which is then audited by the Public Staff. Once the Commission has approved the Account Holder's compliance with the Portfolio Standard, the RECs are retired.

Creation Date: The date (DD/MM/YYYY) that a Certificate is created. Certificates are created upon acceptance of production data by the Account Holder, or if the production data passes all system validations, the Certificates will automatically create fourteen (14) days after the production data was uploaded into NC-RETS.

Customer-Sited Distributed Generation: A Renewable Energy Facility that is interconnected behind a retail customer meter and therefore not directly interconnected with either the distribution system or transmission system (including net metered facilities).

Directory of Account Holders: The Directory of Account Holders is a listing of all Account Holders registered with NC-RETS. This directory includes limited information for contacting each Account Holder and is available to the public via the NC-RETS website.

Directory of Renewable Energy Facilities and Energy Efficiency Projects: This is a listing of all approved Projects within NC-RETS. **Dynamic Data:** Dynamic Data is variable information that is associated with a specific MWh produced or saved by a Project, such as Certificate Serial Number or Creation Date.

Electric Power Supplier: An organization that sells electricity to retail end users, such as investor-owned utilities, municipal utilities, and electric membership corporations. All Electric Power Suppliers in North Carolina must comply with the State's Portfolio Standard, although the requirements vary slightly for investor-owned utilities versus municipal utilities and electric membership corporations.

Forward Transfer: A transfer of Certificates arranged in advance to be effectuated on a specific future date.

Fuel Type: The kind of fuel or source of energy used to produce electric or thermal energy at a Renewable Energy Facility. See Appendix D for a list of eligible Fuel Types. This list was established by the North Carolina General Assembly when it enacted NC's Portfolio Standard.

General Account: This type of Account can hold, transfer (outgoing and incoming), and Retire Certificates for voluntary (non-compliance) reasons. This kind of Account can also open a Sub-account where RECs are created for a Renewable Energy Facility.

Generation Activity Log: The Generation Activity Log is an electronic ledger where energy production from Renewable Energy Facilities and energy saved by Electric Power Supplier energy efficiency programs is posted prior to Certificate creation. Each time production or savings data is received by NC-RETS for a particular Project, the date and quantity of qualifying MWhs produced or saved is posted to the Generation Activity Log. Adjustments received are posted likewise.

Inbox: Certificate transfers to an Account Holder are first posted in the Account Holder's Inbox. The Account Holder then either accepts or rejects the transfer. Upon acceptance, the Certificates are deposited in the Sub-account designated by the Account Holder.

Megawatt-hour (MWh): One thousand kilowatt-hours or 1 million watt-hours of energy. One MWh of energy produced by a qualifying fuel at a Renewable Energy Facility is required to create one Renewable Energy Certificate. One MWh of energy saved by an Electric Power Supplier's energy efficiency or demand side management project is required to create on Energy Efficiency Certificate.

Multi-fuel Facility or Generation Project: A Renewable Energy Facility that produces energy using more than one Fuel Type and might partially rely on a fuel that does not qualify for issuance of Certificates, See Section 4.2 below.



Nameplate Capacity: The maximum rated output of a generator, prime mover or other electric power production equipment under specific conditions designated by the manufacturer. Size classification in Megawatts (MW) is based on Nameplate Capacity.

NC-RETS Administrator: The NC-RETS Administrator is the entity under contract with the Commission to implement the NC-RETS Operating Procedures. The Commission selected APX to be the NC-RETS Administrator. The NC-RETS Administrator confers with Commission Staff, which seeks Commission concurrence, for exceptions to the NC-RETS Operating Procedures.

North Carolina Electric Power Supplier Account: This type of Account can hold, transfer (outgoing and incoming), and Retire Certificates. A North Carolina Electric Power Supplier Account can also register and maintain Projects and have Certificates issued to it for its Projects. A North Carolina Electric Power Supplier Account is the only kind of Account that can retire Certificates for compliance with NC's Portfolio Standard.

Outbox: After initiating a Certificate transfer, an Account Holder will see the Certificates in its Outbox. The Account Holder to whom the Certificates have been transferred will either accept or reject the transfer. If rejected, the Certificates will be returned to the Active Sub-account from which they were transferred. If accepted, the Certificates are transferred to the receiving Account Holder.

Portfolio Standard: The law enacted by North Carolina's General Assembly via Session Law 2007-397 that requires all Electric Power Suppliers serving retail customers in North Carolina to meet an increasing portion of their customers' electricity needs from renewable energy and conservation.

Prior Period Adjustment: An addition or subtraction made to a current Certificate issuance in order to correct for an under- or over-issuance of Certificates made in error in a prior period, most commonly due to inaccurate metering data.

Program Auditor Account: North Carolina regulators will use this Account to review Compliance Sub-accounts submitted by North Carolina Electric Power Suppliers and Utility Compliance Aggregators, as well as to view NC-RETS reports.

Project: A Project is either a Renewable Energy Facility or an Electric Power Supplier's qualifying energy efficiency programs (including demand-side management for municipalities and electric membership corporations).



Project ID: A unique NC-RETS identifier for a Project that is assigned by NC-RETS when the NC-RETS Administrator approves a Project for Certificate issuance in NC-RETS.

Project Name: Project Name is the name assigned to a Project when it is registered in NC-RETS.

Public Staff: The State agency charged with investigating Electric Power Supplier compliance with North Carolina's Portfolio Standard (among other things) and representing the using and consuming public in proceedings before the Commission.

Qualified Reporting Entity (QRE) Account: This Account type should be used for an NC-RETS Account Holder that reports meter readings and other generation data to the NC-RETS Administrator. Qualified Reporting Entities include Balancing Authorities, Electric Power Suppliers, a federal power agency or a municipal power agency. A QRE Account is assigned to each Project (except for those that are allowed to provide Qualified Estimates and Self-Reporting Facilities) and it is responsible for providing the Project's energy production information. NC-RETS tracks the specific Projects for which a QRE provides production information. A QRE Account cannot hold Certificates.

Qualifying Estimates: These are electric production estimates, based on generally accepted analytical tools such as PV Watts (<u>www.pvwatts.com</u>) for inverter-based solar photovoltaic Renewable Energy Facilities with a Nameplate Capacity of 10 kW or less. The facility owner shall document such estimates and retain such documentation for audit by the Commission and the Public Staff. Qualifying Estimates may be used to issue RECs in NC-RETS.

Qualifying Meter: This is a meter that provides energy production data of sufficient quality that it can be relied upon for the issuance of Certificates. For a Renewable Energy Facility that is interconnected to a Balancing Authority, it is the meter or data source that is used by the Balancing Authority for settlements. For Renewable Energy Facilities that are interconnected to an Electric Power Supplier's distribution system, it is the meter supplied by and read by the Electric Power Supplier. For a Renewable Energy Facility that is interconnected behind an Electric Power Supplier's meter at a customer's location, a Qualifying Meter can either be 1) an ANSI-certified meter that may be read and self-reported by the owner of the Renewable Energy Facility who shall comply with the Commission's meter testing requirements pursuant to Commission Rule R8-13; or 2) another industry-accepted, auditable and accurate metering, controls and verification system. For a combined heat and power system or solar thermal energy facility that has been approved by the Commission as a Renewable Energy Facility, the facility's useful thermal energy (excluding energy used to produce electricity) may be measured by an industry-accepted meter for



measuring British thermal units (Btu). NC-RETS shall issue one Certificate for every 3,412,000 Btu of qualifying thermal energy.

Qualifying MWh: Energy that is produced by a Renewable Energy Facility via a fuel source or technology that qualifies it for the NC Portfolio Standard.

Renewable Energy Certificate (REC): See Certificates.

Renewable Energy Facility: An energy production facility that has been approved by the Commission as eligible to have some or all of its output count toward NC's Portfolio Standard. The owner of such a Facility located in North Carolina is eligible to register that Facility in NC-RETS, where Certificates are issued for qualifying energy production.¹

Responsible Party: An Account Holder who has been assigned the registration rights for a given Project. This assignment occurs outside of NC-RETS and gives the designated Account Holder *full and sole* management authority over the transactions and activities related to the Project within NC-RETS.

Retirement Sub-account: A Retirement Sub-account is used as a repository for Certificates that the Account Holder wants to designate as Retired and remove from circulation. Once a Certificate has been transferred into a Retirement Sub-account, it cannot be transferred again to any other Sub-Account.

Retirement of Certificates or **Retirement/Retire:** Retirement of Certificates is an action taken within NC-RETS to permanently remove a Certificate from circulation. There are two types of retirement: voluntary or compliance. Retirement may be initiated only by the Account Holder for Certificates in his/her own Sub-accounts. Voluntary retirement is effectuated by transferring Certificates into a Retirement Sub-account. For Electric Power Suppliers, compliance retirement occurs when RECs are placed into a Compliance Sub-account, and submitted for review to the Commission. RECs associated with an approved Compliance Sub-account are placed into retirement by Commission action.

Self-Reporting Facility: This is a Renewable Energy Facility or utility-sponsored energy efficiency or demand-side management Project for which the owner self-reports its output or energy savings. This includes 1) a customer-sited Renewable Energy Facility interconnected behind an Electric Power Supplier's meter that has either 1) a meter that meets ANSI standards and complies with Commission Rule R8-13, or 2) another industry-accepted, auditable and accurate metering, controls and verification system; 2) inverter-based solar facilities of 10-kW or less; 3) solar thermal facilities; and 4) combined heat and power

¹ The owner of a Renewable Energy Facility that is located in South Carolina, which has its meter read by a NC Electric Power Supplier, may also register the Project in NC-RETS for the issuance of RECs.



facilities. Self-Reporting Facilities transmit their production data to the NC-RETS Administrator via the Self-Reporting Interface pursuant to Section 5.7.

Self-Reporting Interface: This is a standard internet-based data entry portal that serves as the method for a Self-Reporting Facility, including energy efficiency and demand-side management Projects, to communicate dynamic data to the NC-RETS Administrator pursuant to Section 5.7.

Serial Number: NC-RETS assigns a Serial Number to each Certificate that it issues. The Serial Number contains embedded codes that explain when it was issued.

Static Data: Static Data describes the attributes of a Project and includes information related to the characteristics of the Renewable Energy Facility such as technology type, ownership and location.

Station Service: Station Service is the portion of electricity or thermal energy produced by a Renewable Energy Facility that is immediately consumed at that same facility in order to power the facility's pumps, etc., or to process fuel. Such energy is not eligible for issuance of Certificates.

User: Any person who has been granted access by an Account Holder to "use" its Account in NC-RETS, which may include viewing information, performing transactions and changing personal information. The Account Holder may at any time revoke the permissions granted to a User by notifying the NC-RETS Administrator. NC-RETS tracks the specific activities of each User through their unique login and password.

Utility Compliance Aggregator: An organization that assists an Electric Power Supplier or group of Electric Power Suppliers in demonstrating its compliance with NC's Portfolio Standard.

1. Introduction

The Commission established the North Carolina Renewable Energy Tracking System (NC-RETS) to issue and track Renewable Energy Certificates (RECs) and Energy Efficiency Certificates (EECs). NC's electric utilities use NC-RETS to demonstrate compliance with the State's Portfolio Standard established under Session Law 2007-397. Renewable energy producers may register their facilities with the Commission. If approved, they can use NC-RETS to create RECs that meet the requirements of NC's Portfolio Standard.

NC-RETS uses verifiable energy production data from participating facilities to create one digital Certificate for each MWh (or thermal equivalent) generated from renewable energy. Electric Power Suppliers and Utility Compliance Aggregators use NC-RETS to track the results of qualifying energy efficiency and demand-side management customer programs operated by Electric Power Suppliers. NC-RETS and all related energy production and customer program records are audited by the Public Staff of the North Carolina Utilities Commission. NC-RETS will integrate with all other REC tracking systems in the United States to allow for the import and export of RECs to and from North Carolina.

2. NC-RETS User Registration

2.1 Participation in NC-RETS

Any party is eligible to participate in NC-RETS, which means that any person can own RECs and track them in NC-RETS. NC-RETS includes many reports and links that are available to the general public. The Public Staff and the Commission use NC-RETS to audit compliance with NC's Portfolio Standard.

Electric Power Suppliers (or their Utility Compliance Aggregators) must use NC-RETS to demonstrate their compliance with NC's Portfolio Standard. An Electric Power Supplier establishes an Account in NC-RETS to hold RECs, including those that they acquire or generate and those associated with allocations from the Southeastern Power Administration (SEPA). Similarly, an Electric Power Supplier uses NC-RETS to document and track eligible energy savings via Energy Efficiency Certificates (EECs) from its qualifying energy efficiency and demand-side management programs. Each year, starting in 2011 for the 2010 compliance year, Electric Power Suppliers and Utility Compliance Aggregators will move RECs and EECs into a Compliance Sub-account, which will be audited to determine whether the organization

complied with the Portfolio Standard.² Once the Commission determines that the organization has complied, those RECs will be permanently Retired, meaning they cannot be sold or reused for compliance.

NC-RETS issues and tracks Certificates originating from NC's Projects registered in NC-RETS and also tracks those Certificates that are imported into NC-RETS from other tracking systems in the United States. Organizations that operate Renewable Energy Facilities located in North Carolina and that want RECs associated with their facilities' output to be eligible to count toward NC's Portfolio Standard must participate in NC-RETS.³ They use NC-RETS to create an Account for each facility where production data (meter readings or self-reported data, depending on the facility's size) or other criteria are uploaded, and RECs are issued. After arranging to sell RECs to a North Carolina Electric Power Supplier or Utility Compliance Aggregator, they will be able to use NC-RETS to transfer those RECs to the purchaser. In addition, NC-RETS has a Bulletin Board where they can post RECs that they would like to sell.

Utility organizations that read the production meters for any Renewable Energy Facilities located in North Carolina use NC-RETS to provide those meter readings on an on-going basis. NC-RETS uses those meter readings to create one REC for each qualifying MWh of energy produced by a Renewable Energy Facility.⁴

Balancing Authorities (Duke Energy and Progress Energy) that provide energy balancing and accounting at the transmission level, use NC-RETS to upload monthly production data for Renewable Energy Facilities that are interconnected to their transmission systems.

2.2 Establishing an Account

Any person or entity wanting to participate in NC-RETS must establish an Account. Accounts should be established in accordance with the timeline for certificate creation (see Section 6.2) to ensure Certificate eligibility.

² Some municipal utilities and electric membership corporations (EMCs) have contracted with a power agency, GreenCo Solutions, Duke Energy, or Progress Energy, to act as a Utility Compliance Aggregator that will manage and report compliance with the Portfolio Standard on behalf of that municipal utility or EMC.

³ If a facility already participates in PJM's Generation Attribute Tracking System (GATS), it does not need to also participate in NC-RETS. This may be the case if the facility is located in Dominion's service territory.

⁴ "Qualifying MWh" is one that was produced by a fuel that qualifies under Session Law 2007-397 at a facility that has been registered with the Commission as a Renewable Energy Facility. NC-RETS does contain the functionality to apply multipliers in exceptional cases such as the Duke off-shore wind turbines, where one MWh will create more than one REC.



Registrants will provide basic Account registration information, such as Account Holder name, address and contact information, to the NC-RETS Administrator through a secure web-page on the NC-RETS website⁵ and agree to the Terms of Use. (The Terms of Use are available for review on the NC-RETS website, <u>www.ncrets.org</u>, under "Documents.") See <u>Appendix A</u> for step-by-step instructions. The NC-RETS Administrator reviews the Account application and may request more information before approving or rejecting the application. An Account remains active until terminated. Termination can be initiated by the Account Holder by notifying the NC-RETS Administrator. Accounts can also be terminated if an Account Holder fails to pay the NC-RETS fees or is otherwise in default under the Terms of Use. The Terms of Use describe these issues, as well as additional important terms, and should be read and understood by anyone applying to be an Account Holder.

Account Types and Sub-Account Structure

There are four (4) types of Accounts in NC-RETS:

• North Carolina Electric Power Supplier Account: This type of Account can hold, transfer (outgoing and incoming), and Retire Certificates. A North Carolina Electric Power Supplier Account can also register and maintain Projects and have Certificates issued to it for its Projects, including energy efficiency and demand side management programs. A North Carolina Electric Power Supplier Account is the only type of Account that can retire Certificates for compliance with NC's Portfolio Standard. An organization that provides compliance services for another Electric Power Supplier is called a Utility Compliance Aggregator. Only Electric Power Suppliers and Utility Compliance Aggregators are eligible to establish a North Carolina Electric Power Supplier Account.

In 2010, when North Carolina Electric Power Suppliers (and Utility Compliance Aggregators) first register to open an Account in NC-RETS, they will be required to input (on the Account registration screen) their organization's 2009 North Carolina retail sales (in MWh). As soon as NC-RETS generates the Account Holder's first NC-RETS bill on September 1, 2010, the Account Holder's "prior year retail sales" field will be locked. NC-RETS will use the locked sales data to calculate bills from September 2010 through June 2011. In June of 2011 and each subsequent year, the Account Holder must enter the "prior year's retail sales" data. Each July NC-RETS will use the new sales data to calculate monthly bills for North Carolina Electric Power Suppliers. For more details, please refer to the Fee Schedule, which is on-line at www.ncrets.org.

⁵ <u>http://www.ncrets.org</u>

• **General Account:** This type of Account can register Projects and have RECs issued to it for its Projects. (Before creating Certificates in NC-RETS, a Renewable Energy Facility must first register with the Commission.) A General Account can hold, transfer, and Retire Certificates (for reasons other than compliance with NC's Portfolio Standard). The Account Holder for a Renewable Energy Facility Project can seek eligibility for its facility with Green-e Energy or Low-Impact Hydro Institute (LIHI). If accepted by those organizations, NC-RETS can indicate such eligibilities on Certificates issued for output from the facility.

• Qualified Reporting Entity (QRE) Account: An Account Holder with a QRE Account is assigned to a Project and is responsible for providing energy production information such as monthly meter readings for that Project. A QRE Account cannot hold Certificates. The QRE uses its NC-RETS Account to upload meter reads or monthly settlement data for each Project to which it is assigned. An Electric Power Supplier should have a QRE Account if it reads the production meter for Renewable Energy Facilities, or if it is a Balancing Authority.

• **Program Auditor Account:** This type of Account will allow Commission and Public Staff to perform compliance review and auditing of program data as needed.

Accounts that can hold Certificates (North Carolina Electric Power Supplier and General Accounts) are given three types of Sub-accounts automatically by default when their Account is approved (Active, Retirement and Export Sub-accounts). An Active Sub-account is used to organize Certificates based on an organization's business structure as desired. The default Retirement Sub-account is used to Retire Certificates for voluntary reasons (that is, reasons other than compliance with NC's Portfolio Standard). The Export Sub-account is used to transfer Certificates to another tracking system. The Account Holder has the ability to rename these default Sub-accounts and create as many additional Active and Retirement Sub-accounts as necessary to meet their organization's needs. Retirement Sub-accounts cannot be renamed if they hold Certificates. When Certificates are issued, they are placed into an Active Sub-account that was designated when the Project was registered with NC-RETS. When an incoming Certificate transfer is pending, the recipient Account Holder identifies the Active Sub-account into which the Certificates will be deposited. Each Account Holder will be able to view a listing of Certificates held in each Sub-account and their attributes (e.g. static Project details, eligible program certifications and Certificate origination details).

Accounts that can hold Certificates also have a single Bulletin Board Sub-account, used to post Certificates for sale on the NC-RETS Bulletin Board.

Each Account and Sub-account has a unique identification number. For ease of reference, Account Holders may attach aliases to Sub-accounts (e.g., by customer or by product name).

North Carolina Electric Power Suppliers and Utility Compliance Aggregators will have the ability to create Compliance Sub-accounts. Compliance Sub-accounts can only be used to Retire Certificates for the Portfolio Standard. A Compliance Sub-account is established for a specific compliance year, and the Account Holder must designate whether the Sub-account is subject to the compliance obligations of an electric public utility or the compliance obligations of a municipality / electric membership corporation or a group of municipalities / electric membership corporations.

2.3 Deposits to Active Sub-Accounts

There are four ways that Certificates are deposited into an Active Sub-account.

- (a) Within an Account, Certificates can be transferred from one Active Sub-account or Bulletin Board Sub-account to another.
- (b) An Account Holder can accept a transfer of Certificates from another Account Holder.
- (c) Certificates can be generated by a Project and deposited by the NC-RETS Administrator into the Sub-account assigned to the Project.
- (d) Certificates can be transferred into a Compliance Sub-account prior to the Compliance Sub-account being submitted for review by the Commission and Public Staff.

2.4 Transfers from Active Sub-Accounts

There are two ways to withdraw or remove Certificates from Active Sub-accounts:

- (a) Transfer the Certificates to the Sub-account of another Account Holder.
- (b) Transfer the Certificates to another of the Account Holder's own Sub-accounts (Active, Retirement, Export, Compliance, or Bulletin Board Sub-account).

Certificates that have been deposited in a Compliance Sub-account cannot be moved out of that Sub-account once the Electric Power Supplier or Utility Compliance Aggregator submits the associated Portfolio Standard Compliance Report to the Commission for review.

2.5 Retirement Sub-Accounts

A Retirement Sub-account is used as a repository for Certificates that the Account Holder wants to designate as voluntarily retired. There are three ways that Certificates are deposited in a Retirement Sub-account:

- (a) Within an Account, Certificates can be transferred from an Active Sub-account or a Bulletin Board Sub-account to a Retirement Sub-account.
- (b) An Account Holder can accept a transfer of Certificates from another Account Holder directly into a Retirement Sub-account.
- (c) Certificates can be transferred from a Compliance Sub-account to a Retirement Sub-account prior to the Compliance Sub-account being submitted for review by the Commission and Public Staff.

An Account Holder choosing to retire a Certificate or a block of Certificates will use the transfer screen to identify the quantity of Certificates to Retire and the reason for Retirement. The Account Holder must select the Retirement Sub-account to which the Certificates will be deposited. The Retirement Sub-account will show the Serial Numbers of the Certificates Retired, the date of Retirement and the reason for Retirement. In addition, there will be a mechanism to view the Project characteristics and Certificate fields associated with the Retired Certificates. *Once Certificates are Retired, they cannot be moved or transferred out of the Retirement Sub-account to any other Sub-Account or Account Holder.*

NC-RETS validations ensure that Certificates deposited in a Retirement Sub-account are no longer transferable to another party or another Sub-account. NC-RETS reports allow Account Holders to show evidence of the Retirement.

2.6 Compliance Sub-Accounts

A Compliance Sub-account will be available to North Carolina Electric Power Suppliers and Utility Compliance Aggregators only. These entities can have one electric public utility Compliance Sub-account per compliance year and an unlimited number of municipal utility / electric membership corporation type of Compliance Sub-accounts per year. For example, for 2010, an Electric Power Supplier can have one Compliance Sub-account for itself (as an electric public utility) and 1 or more for each municipality/coop or group of such electric power suppliers for which it provides compliance reporting. Each Compliance Sub-account will be subject to the statutory requirements for either: 1) an electric public utility, or 2) a municipal utility/electric membership corporation (cooperative). Certificates in a Compliance Sub-account will be in a "pending retirement status" while the State Program Auditor/Regulator accesses it via a compliance report for audit. When that review and the related regulatory proceeding are complete, the Commission will use NC-RETS to finalize Retirement of the Certificates into a permanent Retirement status. State Program Auditors will see the related Compliance Report from their own Accounts.

There are two ways that Certificates are deposited into a Compliance Sub-account:

- (a) Within an Account, Certificates can be transferred from an Active Sub-account or a Bulletin Board Sub-account to a Compliance Sub-account.
- (b) An Account Holder can accept a transfer of Certificates from another Account Holder directly into a Compliance Sub-account.

The NC-RETS Administrator is not responsible for the Retirement of Certificates by Account Holders, as it relates to voluntary or compliance-related Retirement deadlines or otherwise.

2.7 Transfers between Accounts

North Carolina Electric Power Supplier and General Account Holders may transfer Active Renewable Energy Certificates to other Account Holders. Certificates will be specified by their Serial Numbers. The Account Holder will select the recipient from a pull-down list of Account Holders. After the transfer has been initiated, the Certificates that are pending transfer will be marked as "transfer pending" in the Account Holder's Outbox. This will have the effect of "freezing" the Certificates so that they cannot be moved to another Sub-account or to another Account Holder.

After the transfer has been initiated, NC-RETS will send an electronic notification of the request to transfer Certificates to the proposed recipient. The transfer recipient can review the Certificate transfer details from the Account Holder's Outbox and must confirm or reject the transfer within fourteen (14) calendar days of when it was requested by the transferor. If rejected, the Certificates will be deposited back into the originating transferor's Sub-account. If confirmed, the transfer recipient must designate the Sub-account to which the Certificates are to be delivered. As soon as the recipient has confirmed or rejected the transfer, NC-RETS will send an electronic notification to the transferor indicating the action taken. The transferor may cancel any transfer before such transfer has been confirmed by the recipient by withdrawing the transfer from the Account Holder's Outbox in NC-RETS. If the transfer is withdrawn, NC-RETS will notify the recipient of the action.

2.8 Compatible Tracking Systems

NC-RETS is set up to accept transfers of eligible Certificates from compatible tracking systems. A compatible tracking system is a system that has set-up up a process with NC-RETS on how to handle imports and/or exports and

implemented the required technology. NC-RETS is working towards setting up imports and exports with all registries that track generation from facilities that have been approved by the NC Commission. Appendix F lists the compatible tracking systems at the time of NC-RETS launch. This list is also posted at <u>www.ncrets.org</u> and will be updated as more registries are deemed to be compatible.

2.8.1 Imports from other Tracking Systems

Only Certificates from facilities and fuel types that have been approved by the Commission can export Certificates to NC-RETS. In order to import a Certificate from another tracking system the Account Holder in the exporting tracking system will need to follow that tracking system's procedures for an export. This generally includes designating a specific batch of Certificates for export and designating the importing registry (i.e. NC-RETS) and the importing NC-RETS Account Holder (Account ID and name).

The NC-RETS Account Holder will see the imported Certificates in their Inbox module. Under the "From" column, with the registry from which the RECs are coming will show in the Inbox module. a note stating that these are import Certificates. The Certificate transferor will be the NC-RETS Administrator.

The imported Certificates will have a unique Serial Number that references the originating registry instead of NC-RETS. The Certificate data screen will also contain the original Serial Number from the issuing registry. All Projects from which Certificates have been imported into NC-RETS will be listed on the public 'Imported Facility Report.' No information about the quantity transferred and the parties involved in the transaction will be publicly posted.

Tracking systems track fuel types differently. Certificates in NC-RETS will issue with the fuel types used by NC-RETS and that correspond to fuel types approved by the Commission.

2.8.1.1 Multi-fuel Facilities that use Swine and/or Poultry Waste

Only NC-RETS and the North American Renewables Registry (NAR) currently can track swine waste and poultry waste Certificates separately from other kinds of biomass used in a Multi-fuel Facility. If a NC-RETS Account Holder is planning to import Certificates from a Project that is (1) registered in a tracking system other than NAR, and, (2) using more than one type of biomass, and, (3) where one or more of the fuels is swine and/or poultry waste, then additional procedures are needed to correctly differentiate swine and/or poultry



waste Certificates from other biomass Certificates. NC-RETS Account Holders contracting for such Certificates should contact the NC-RETS Administrator before the export is initiated from the exporting tracking system. The NC-RETS Administrator and the Commission will ask the NC-RETS Account Holder for Project specific information (i.e. fuel deliveries, generation data etc.) needed to substantiate that swine and/or poultry waste generated the energy associated with the RECs.

If the Project only uses one biomass fuel (i.e. swine waste or poultry waste) the above procedure is not needed.

2.8.2 Exports to other Tracking Systems

In order to export a Certificate to another tracking system the NC-RETS Account Holder will designate a specific batch of Certificates for export and designate the registry and Account Holder (Account ID and Name) to whom the Certificates should be delivered.

After the transfer has been initiated, it will show up in the NC-RETS Account Holder's Outbox module as "Pending." It will remain "Pending" until the NC-RETS Administrator confirms that the Certificates are eligible for export to the importing tracking system.

3 Access to Accounts and Confidentiality

3.1 Account Access

An Account Manager is established as part of the Account registration process. The individual listed in the initial Account application will be considered the Account Manager and have the ability to setup and manage any additional User logins and login privileges for his or her organization. The Account Manager will have full access to the organization's Account. The Account Manager can customize login permissions to allow view-only access to information or to allow the User to perform activities such as transfers and submitting/updating information. Such privileges can also be further attached to specific Sub-accounts or Projects. This provides Account Holders with significant flexibility when assigning Users to specific tasks or roles. User login setup can be done during the Account registration process or at any time the Account Manager wishes to add Users to the Account. The Account Manager supplies contact information for each User and designates their login name and password.

NOTE: The NC-RETS Terms of Use shall apply to any person who receives access to an NC-RETS Account or Sub-account from an Account Holder or Account Manager.



Once a User login is established, NC-RETS sends an email to the login contact specified by the Account Manager with details on the individual's login name. The Account Manager is required to communicate the password to the new User. Upon logging into NC-RETS for the first time, the new User is prompted by NC-RETS to change his or her password. The new User can then perform the functions or view the information per the permissions granted by the Account Manager. The Account Manager or NC-RETS Administrator may at any time remove or add permissions to a User by using the Account administration screens.

The NC-RETS My Event Log report tracks and displays all actions performed within the Account by login name and timestamp. Account Managers have access to the My Event Log report for their Account and Sub-accounts.

3.2 Levels of Account Access

When an Account Holder creates logins for additional Users, the Account Holder assigns to the User one of two levels of specific access rights:

3.2.1 Account Holder – Supervisor

When completing the login profile for a new User, the Account Manager can assign them "Account Holder – Supervisor" privileges. Such a new User is able to register Projects, manage Certificates, and create additional logins, if necessary. The Account Manager can also give this User a subset of these privileges if needed.

3.2.2 Account Holder – View Only

When completing the login profile for a new User, the Account Manager can assign the User "Account Holder – View Only" privileges. This provides the User with limited view rights. The Account Manager will then identify the specific Sub-accounts and Certificates that the User will be able to access and view.

3.3 Confidentiality

As stated in the Privacy Policy [<u>www.ncrets.org</u>] and the Terms of Use, certain Account information is held confidential. Account information is only used and released by NC-RETS in aggregate through the public reporting process.

4 **Project Registration**

Within NC-RETS and all related NC-RETS documents, the term "Project" is used to refer both to (1) a generating Project, which is a Renewable Energy Facility registered with the Commission, accepted by the NC-RETS Administrator and for which NC-RETS issues Certificates, and (2) an energy efficiency Project, which is registered with NC-RETS by an Electric Power Supplier for its energy



efficiency or demand-side management programs, or a Utility Compliance Aggregator on behalf of an Electric Power Supplier. (Note: only municipal utilities and electric membership corporations can use their demand-side management programs for Portfolio Standard compliance.) Once a Project is registered within NC-RETS, monthly production data or annual energy savings can be uploaded to NC-RETS to create Renewable Energy Certificates or Energy Efficiency Certificates. Step-by-step instructions for registering a Project can be found in <u>Appendix B</u>.

4.1 Registering a Project

To ensure that double-counting does not occur, Renewable Energy Facilities registered in NC-RETS must have 100% of their output tracked by NC-RETS (with the exception of imported Certificates). If a Renewable Energy Facility or an associated contract for its production was registered in another tracking system at one point, the NC-RETS Administrator should be notified of this during the registration process and the Account Holder should be prepared to provide documentation to prove the Renewable Energy Facility (and, if applicable, its associated contracts) have been removed from the previous tracking system.

The owner, or Responsible Party, of a Renewable Energy Facility must first establish an Account within NC-RETS as described above and then register a Project as a Renewable Energy Facility or an Energy Efficiency Project, as the case may be, before NC-RETS can certify and issue Certificates attributable to it. The Account types that can register Renewable Energy Facilities are the NC Electric Power Supplier Account and the General Account. Only the NC Electric Power Supplier Account can register energy efficiency Projects in NC-RETS.

To register a Renewable Energy Facility or an energy efficiency Project (which would include DSM programs), the owner or the Responsible Party must:

- Have an approved Account in NC-RETS;
- Have registered with the Commission and received approval from the Commission for the Renewable Energy Facility; and
- Submit a completed on-line registration form containing information related to the characteristics of the Renewable Energy Facility or energy efficiency Project. (Note: Many Electric Power Suppliers will have several energy efficiency programs – their energy savings will be uploaded into one Project.)

The NC-RETS Administrator will review the information provided and request additional information as needed before approving a Renewable Energy Facility registration request in NC-RETS.

4.2 Multi-fuel Renewable Energy Facility Project

A Multi-fuel Renewable Energy Facility Project is one that produces energy using more than one Fuel Type. A Multi-fuel Renewable Energy Facility Project can use a renewable fuel with a fossil fuel or use multiple types of renewable fuels. Such facilities must register with NC-RETS as a Multi-fuel Renewable Energy Facility Project. If the relative quantities of energy produced from each fuel cannot be measured or calculated, and verified, the facility is not eligible to register as a Multi-fuel Renewable Energy Project in NC-RETS.

Each Certificate issued for a Multi-fuel Renewable Energy Facility Project will reflect only one Fuel Type. The total number of Certificates issued for a Fuel Type in a reporting period will be proportional to the energy output from that Fuel Type for that reporting period.

Each NC-RETS Account Holder or Responsible Party that has registered a Multi-fuel Renewable Energy Facility Project must report monthly to the NC-RETS Administrator the proportion of energy output per Fuel Type, by MWh or Btu, generated by the Multi-fuel Renewable Energy Facility Project during that month, calculated according to the applicable provisions of Section 5.9.1. Though energy produced from all Fuel Types must be reported, NC-RETS will only issue Certificates for the qualified renewable energy. Certificates will not be issued until such information is provided by the Account Holder or Responsible Party.

The procedures and methodologies used by the Account Holder or Responsible Party to calculate the contribution of each Fuel Type should be retained by the Account Holder or Responsible Party according to Commission rules, and will be subject to audit by the Public Staff and the Commission.

To import Certificates from multi-fuel generators, see Section 2.8.1.

4.3 Verification of Static Data Submitted During Project Registration

Upon completion of the Renewable Energy Facility Project registration process, the NC-RETS Administrator will review attestations, Energy Information Administration reports and other data sources to verify the information provided by the Account Holder.

In the event data submitted is found to be incorrect or if there is a discrepancy between the information submitted during the on-line registration process and the materials provided to verify the information, the NC-RETS Administrator will notify the registrant that the information could not be positively verified. A process of either correcting the registration form, or withdrawing the



registration form, or providing proof that the information on the registration form is correct will ensue between the NC-RETS Administrator and the registrant until the NC-RETS Administrator is satisfied that the information provided meets NC-RETS standards for accuracy. If any issues arise, the NC-RETS Administrator will raise them with the Public Staff in case a site visit is needed to verify the legitimacy of Project registration and generation data.

4.4 Updating Static Data

After the initial Project registration in NC-RETS, Account Holders should continually notify NC-RETS of the following actions or occasions that will have the effect of changing Static Data tracked by NC-RETS:

- (a) A change in Fuel Type for a Renewable Energy Facility, and the date on which the change occurred, within thirtyfifteen (3015) calendar days from when the change is implemented. (The Account Holder should also notify the Commission, referencing the docket number from its registration order.)
- (b) A change in Project ownership, and the date on which the change occurred, within thirtyfifteen (3015) calendar days after the change occurs. A change in ownership must be confirmed by a letter signed by both the prior and new owners of the Project, and provided to the NC-RETS Administrator. Neither NC-RETS nor the NC-RETS Administrator will be responsible for depositing Certificates into an Account that no longer represents a Project if the incorrect deposit occurs as a result of a lack of notification by the prior and new owners of the Project. Parties should arrange for a meter-reading to occur coincident with the ownership change. This meter read will be used to determine the final REC issuance to the original owner. Subsequent production data will be used to generate RECs that will be issued to the new owner. (A facility owner must notify its QRE of any change of ownership. A new owner must also register the facility with the Commission.)
- (c) A change in a Project's eligibility for any programs or certification tracked by NC-RETS. This must be communicated by the Account Holder before any Certificates affected by the change are issued or within thirtyfifteen (3015) calendar days after the change occurs, whichever is sooner.
- (d) A change to any of the "essential generating characteristics" of the Project.

4.5 Misrepresentation of Static Information:

Account Holders can be removed from NC-RETS for cause, including misrepresentation of Static Data. NC-RETS reserves the right to withhold issuing Certificates, to freeze a Sub-account or Account associated with a particular Project, or to withhold participation in NC-RETS for Projects that

have willfully misrepresented Static Data. If the NC-RETS Administrator has cause to suspend the Project's participation in NC-RETS, no Certificates will be created while the Project is under suspension. While under suspension, metering data may continue to be uploaded to the Project by the QRE but it will not contribute to Certificate creation. Upon removal of the suspension, Certificate issuance can proceed.

4.6 Terminating a Project's Participation in NC-RETS

If a Project's owner or Responsible Party wants to remove a Project from NC-RETS, they can do so by notifying the NC-RETS Administrator and specifying the following:

- (a) The date the Project should be/will be removed from NC-RETS;⁶
- (b) The name of the Project's Qualified Reporting Entity, if applicable; and
- (c) The Sub-account to which Certificates should be deposited (if the usual Account for deposit is being closed as well).

NC-RETS will issue Certificates for a Project up to the date of Project termination as instructed by the Project's owner or Responsible Party. No Certificates will be issued for adjustments that occur after the termination date. If the Account to which the Project is linked is also closed at the same time, the Project's owner or Responsible Party must also specify the Account to which any remaining Certificates that have not yet been issued should be deposited. Failure to do so will result in loss of Certificates.

4.7 Changing the Account (Owner) with which a Project is Associated

If the Project's owner or Responsible Party wants to change the Account with which a Project is associated, they can do so by notifying the NC-RETS Administrator and providing the information requested by the NC-RETS Administrator, including, but not limited to:

- (a) The new Account number with which the Project will be associated;
- (b) The date the change will be effective; and
- (c) Any documentation required for legal purposes or to meet certification requirements.

Certificates from the Project that were created up to the day the Account change takes effect will remain in, or be deposited into, the Account that the Project was associated with at the time the generation occurred. For example, if a Project's owner changes the Account with which the Project is associated from Account A to Account B, and the change is effective on March 1,

⁶ This is the same as the final date of generation for which Certificates are to be issued.

then the Certificates relating to generation that issued prior to March 1 will be deposited into Account A. Any issuance from the Project after March 1 will go into Account B.

The NC-RETS Administrator will need written confirmation of this change from both parties involved in the Project transfer in order to implement the change. When changing the Account with which a Project is associated, there cannot be any time when the Project is not associated with an Account. If there is such a lapse, this will be treated as a deregistration/re-registration of the Project instead of a change of Account. (Note: Project owners also need to inform the Commission of a change in ownership, referencing the docket number that the Commission assigned to their registration order.)

5 Dynamic Data in NC-RETS – Generation Data – Role of Qualified Reporting Entity

5.1 Qualified Reporting Entity (QRE) Guidelines

A QRE is a Balancing Authority, an Electric Power Supplier, or a federal or municipal power agency. They provide production data to NC-RETS for Renewable Energy Facilities at least monthly. A Balancing Authority provides data consistent with its monthly settlements process. Other QREs provide data from routine meter readings. Each QRE adheres to the following guidelines:

- 1. A QRE that must also comply with the Portfolio Standard shall demonstrate that its employees who are responsible for reporting facility production data are separated organizationally from its employees who are responsible for Portfolio Standard compliance. "Separate from" means that the QRE employee(s) work in a separate department, division, section or unit that is not responsible for planning for, demonstrating or assuring Portfolio Standard compliance. The NC-RETS Administrator may make exceptions for extremely small Electric Power Suppliers after consulting with the Commission. However, in no event shall the employee who uses NC-RETS for compliance purposes.
- 2. A QRE creates a QRE Account in NC-RETS. The NC-RETS Administrator will validate the application information that it submits.
- 3. Upon approval, each QRE is added to the list of QREs available for selection by a Project. Upon registration, a Project will have to provide a unique ID that is assigned by the QRE, which links its facility to the QRE. NC-RETS will provide each QRE with a list of the Projects that have selected it. When a new Project selects the QRE, the QRE will be notified via e-mail.



- 4. A QRE will at least monthly provide electricity production data to NC-RETS that is inherently reliable and auditable. If the meter-read period spans parts of two months, the QRE shall assign the usage to the later month.
- 5. Reported electricity production data shall be financial settlement quality data from revenue quality meters, which would include those that meet ANSI-12 standards.
- 6. Each QRE shall upload data to NC-RETS. The QRE must use a valid active NC-RETS login and password associated with its NC-RETS QRE Account. After logging into the Account, the QRE Account Holder should locate the Meter Data Loading module. To locate the desired generation output file, the User selects the Meter Data Loading module's "browse" button to display a pop-up screen where the User can locate the desired file on computer or network drives. After selecting a file, the User selects the <u>"Year" and then the</u> "Upload Now" button to upload the file. The file must be formatted in ASCII Text with data fields delimited by commas (Comma-Separated Value (CSV) format).

The following example shows a conforming input file.

NCRETSPROJECTID, REPORTINGENTITYID, VINTAGE, FROMDATE, TO DATE, TOTALMWH 114, 2A58A68, 08/2010, 08/01/2010, 08/31/2010, 100

Field Name	Data Type	Description
NCRETSPROJECTID	Integer	Unique NC-RETS
		identifier for the Project
		assigned by NC-RETS
		upon Project approval.
REPORTINGENTITYID	Integer and	Unique identifier for the
	Character(50)	Project assigned by its
		QRE from the QRE's
		internal systems.
VINTAGE	Numeric	Month and year of
	Character(7)	production, formatted as
		MM/YYYY for any month
		in the current reporting
		period

The fields are as described in the following table:



FROMDATE	Numeric Character(10)	Begin month-day-year of production output period formatted as MM/DD/YYYY
TODATE	Numeric Character(10)	End month-day-year of production output period formatted as MM/DD/YYYY
TOTALMWH	Floating decimal	Total MWhs for reporting period, with three spaces beyond the decimal

A current period output file can be loaded as many times as needed adhering to the following restrictions. (1) After an Account Holder has explicitly accepted the posted output data, NC-RETS will not accept re-loaded data for the same production period. NC-RETS will reject an attempted re-loaded. If the Account Holder has not yet accepted, the QRE can re-load the data, the previous data will be over-written and the Account Holder will receive notification of new data being posted. Otherwise, the QRE should contact the NC-RETS Administrator, who can re-load the file if it is appropriate to do so. (2) If NC-RETS has accepted the data or the Account Holder has disputed the data, and no Certificates have yet issued, a QRE can re-load the data. In all other instances, the QRE should work with the NC-RETS Administrator if it believes data needs to be re-loaded.

NC-RETS will validate a Project's uploaded data before posting the output into the NC-RETS data base. When all validations⁷ are successfully completed, the data is loaded into the database and can be seen in a Project's Generation Activity Log. If the Project fails to produce energy in a given month, a QRE should report by uploading "zero" to be accepted by the Account Holder. NC-RETS then notifies the Account Holder via email that generation output has been loaded for the Project, and the data is available to be reviewed for approval or dispute.

5.2 Generation Data Requirements

NC-RETS will not create Certificates for generation supplying Station Service. Data used to issue Certificates for Renewable Energy Facilities must be derived from a Qualifying Meter or Qualifying Estimate and communicated to the NC-RETS Administrator.

For Renewable Energy Facilities whose output is settled monthly by a Balancing Authority, a "Revenue-Quality Meter" is the data source used by

⁷ Validations include correct assignment of QRE, assessment of engineering feasibility of output, potential overlap of reporting period with prior uploads, data exceeds 3135 days reported for a given vintage, and whether data for a previous period remains subject to dispute.



the Balancing Authority for settlements. The data must be electronically collected by a meter data acquisition system, such as an MV-90 system, or pulse accumulator readings collected by the Balancing Authority's energy management system, and verified through a Balancing Authority checkout/energy accounting or settlements process that occurs monthly. The preferred source for the data is a meter data acquisition system. If the Balancing Authority does not have an electronic source for collecting revenue meter data, then manual meter reads will be accepted.

When a QRE submits generation data (either manually entered or uploaded via file) NC-RETS validates the data to verify its engineering feasibility. To perform the validation, NC-RETS uses the following required variables from the Generating Project Registration screen:

- Nameplate Capacity
- Capacity Factor or Maximum Annual Energy

Data validation is performed for both current period reporting and Prior-Period Adjustment reporting, regardless of whether the data is loaded as a file or entered-manually in the Project's Self-Reporting Interface. To determine the feasibility of the submitted data, NC-RETS will use the following equations:

For those Projects with a registered "Capacity Factor": (Nameplate Capacity) * (Capacity Factor) * (number of hours in the duration) * (1.02)

For those Projects with a registered "Maximum Annual Energy": (maximum annual energy)/(8760 hours in a year)] * (number of hours in the duration) * (1.02)

The number of hours in the duration is based on the duration of the generating period each time the information is reported on the Project. To determine the duration value, NC-RETS will calculate the number of hours in the generating period (for example, the number of hours in the generating period with a Begin Date of January 1, 2006 and an End Date of January 31, 2006 would be 744). The 1.02 will allow for a margin of error.

If the validation is successful, and the reported energy production is less than or equal to the maximum feasible generation for the facility, the data becomes available to the Account Holder to review and then accept, or dispute. If the Account Holder accepts the data, it will be included in the next Certificate issuance cycle. For Prior-Period Adjustments, the data will contribute to the next Certificate issuance after it was accepted (either by the Account Holder, or auto-accepted by NC-RETS).

If the loaded data fails the engineering feasibility validation, the QRE will be prompted with a "soft" warning as to the failed validation. The QRE has the



ability to continue posting the data by selecting the "continue" button on this pop-up screen. If the QRE wishes to continue posting data, NC-RETS will send an automated email to both the NC-RETS Administrator and the Account Holder that the data loaded for their Project has failed the engineering feasibility validation, but that the QRE has decided to have the data posted to the database anyway. The notification will also state that the data has a status of "NC-RETS Pending" until either corrected, or approved by the NC-RETS Administrator. Data with this status will not contribute to Certificate creation. The QRE can instead decide to not post the data to the database as a result of the failed validation by selecting the "cancel" button on this same pop-up screen. Selecting cancel will discontinue the data loading process for the Project in question and no notifications will be sent.

For all loaded data, the NC-RETS Administrator will have a report "Engineering Feasibility Estimate Calculations Report" which will list all Projects that have had data loaded, the amount of output loaded, and the feasibility pass/fail result.

NOTE: Failed validation for a single facility does not result in a failure to load the entire file – only the data for the facility that failed the validation.

5.3 Measurement of Generation and Adjustments

The output from each Renewable Energy Facility Project registered in NC-RETS will be measured at the point of interconnection to the transmission or distribution company's facility. Losses occurring on the bulk transmission or distribution systems after the metering point are not reflected in the Certificates created. NC-RETS will not create Certificates for that portion of the generation that is used to supply Station Service, and therefore, generation data should also be netted of Station Service supplied from the generator's side of the point of interconnection. For Renewable Energy Facilities also serving onsite loads, NC-RETS will create Certificates for the on-site load distinct from Station Service, if the facility's owner or Responsible Party can provide evidence that the metering used is capable of distinguishing between on-site load and Station Service. If adjustments are needed, due to metering, reporting, error or any other reason, the QRE must report the adjustment as soon as possible to the NC-RETS Administrator. If Certificates have not yet been created for the original generation amount to which the adjustment applies, the Certificate or debit will be posted to the Generation Activity Log, and will be reflected in the number of Certificates created. If Certificates have been created, the adjustment will be treated as a Prior Period Adjustment described below in Section 5.4.

5.4 **Prior Period Adjustments**

Adjustments can be requested by an Account Holder, including Self-Reporting Facilities, or a QRE, after the data is reported and used to



issue Certificates in NC-RETS. These adjustments are known as Prior Period Adjustments. The Account Holder accesses the Project Output Data Review screen to submit an adjustment to the NC-RETS Administrator. If accepted by the NC-RETS Administrator, the Certificate or debit to the generation volume reported in the current month will post to the Generation Activity Log. Consequently, the adjustment will be realized when Certificates are next issued. If new Certificates are created, the vintage of the Certificates shall reflect the actual generation period. NC-RETS will not accept adjustments for generation reported more than one year prior.

5.5 Notification of Adjustments

The Account Holder will be informed of all positive or negative adjustments once the adjustment has been posted to the Generation Activity Log. Once NC-RETS informs the Account Holder of a need for adjustment, the Account Holder then has fourteen (14) calendar days to dispute or accept the adjustment. If after fourteen (14) days the Account Holder has failed to respond, the NC-RETS Administrator will automatically accept and create the adjustment.

5.6 Data Collection Procedure

Energy-generation data should be reported within 30 days of the meter read and will be accepted by the NC-RETS Administrator on an ongoing basis. Currently, NC-RETS can accommodate data in batches that contain up to 35 days of production data. [In order to conform to Commission rules, the NC-RETS Administrator will pursue changes such that NC-RETS will be able to accommodate 35 days worth of production data.] Data files are to be electronically transmitted to NC-RETS using a secured protocol and a standard format specified by the NC-RETS Administrator. The data shall reflect, at a minimum, the month and year of the generation, monthly accumulated MWhs for each NC-RETS Project ID and the associated NC-RETS and Project ID(s) for each Project. The owner of the Generating Project, as the owner of the metered data, or the Responsible Party, has the responsibility to direct the QRE to release generation data to NC-RETS.

The data must be transmitted by a single entity, which must be either (1) a QRE Self-Reporting Facility.

5.7 Special Requirements for Self-Reporting Facilities Only

A Self-Reporting Facility must enter actual cumulative meter readings measured in kWh / MWh or Btu (which will be converted to MWh) and the date of the meter reading via the Self-Reporting Interface. Actual cumulative meter readings must be entered no less frequently than annually. If a Self-Reporting Generator chooses to report data in cumulative over the course of multiple months (for example, 01/2010-06/2010), it can do so by uploading the data for the most recent vintage month (06/2010) and providing



evidence of the monthly breakdown quantity to the NC-RETS Administrator. Self-Reporting Facilities that do not enter meter readings via the Self-Reporting Interface as required will receive a reminder notice by email from the NC-RETS Administrator. Self-Reporting Facilities risk having their Project de-activated in NC-RETS if they do not provide meter readings at least annually.

5.8 Generation Activity Log

Each Project registered in NC-RETS will have a Generation Activity Log associated with it. The Generation Activity Log is an electronic ledger where generation is posted prior to Certificate creation. Each time generation data is received by NC-RETS for a particular Project, the date and quantity of MWh is posted to the Generation Activity Log. Similarly, adjustments received will be posted likewise. The status of each entry in the Generation Activity Log will be noted, where the possible values are:

• **NC-RETS Accepted:** This label is used for all generation that has been reported to NC-RETS, has passed the NC-RETS feasibility test and has been logged to the Generation Activity Log, but has not yet been accepted (or disputed) by the Account Holder.

• **NC-RETS Pending:** The NC-RETS Administrator is waiting for the resolution of a situation before the Certificates can be issued. For example, if the NC-RETS Administrator is waiting to receive a Fuel Type allocation from a Multi-fuel Generation Project or other update from a Generating Unit.

• **Account Holder Accepted:** The Account Holder has accepted the posted generation, but the Certificates have not yet been issued.

• **NC-RETS Admin Accepted:** The NC-RETS Administrator has accepted the posted generation, but the Certificates have not yet been issued.

• **Account Holder Disputed:** The Account Holder has disputed the posted amount of generation.

• **NC-RETS Admin Disputed:** The NC-RETS Administrator has disputed the posted amount of generation.

• **Certificates Created:** Certificates have been created.

The status of each entry in the Generation Activity Log will be changed consistent with the information received by the NC-RETS Administrator. Certificates will be issued based on the total whole number of MWh on the Generation Activity Log that are marked "Account Holder Accepted." Only Certificates that are marked as such will contribute to Certificate creation. Any fractional MWh will be rolled forward until sufficient generation is accumulated for the creation of a Certificate. Each time an item is posted to the Generation Activity Log, the Account Holder will be notified electronically.

Account Holders will have fourteen (14) calendar days to accept or dispute any new regular entries to the Generation Activity Log and fourteen (14) days to accept or dispute adjustments. If the Account Holder does not respond, the posting will be automatically accepted after the specified period and Certificates issued.

The Generation Activity Log will include, at minimum, the following entries:

- (a) Account Holder's Name
- (b) Activity Date
- (c) NC-RETS Project ID for associated data posted
- (d) Activity Description identifying Data Submitted, Fractional Data Remaining, Certificates Created, etc.
- (e) Reporting Period Start
- (f) Reporting Period End
- (g) MWh of generation reported to NC-RETS during the current month
- (h) Fuel Type
- (i) Status
- (j) Note (displaying Serial Numbers or data upload file names)

5.9 Multi-fuel Generation Projects

For Multi-fuel Generation Projects, Certificates will be created for the eligible Fuel Type(s) only.⁸ Each Certificate issued for a Multi-fuel Generation Project will reflect only one fuel source, with the total number of Certificates issued for a Fuel Type being proportional to the overall output for that reporting period.

After each upload of production data, the Project's Account Holder will be asked to first verify the energy production data, and then input how much of the production is attributable to each Fuel Type. The Account Holder for the facility shall retain for audit supporting documentation related to the derivation of the proportion of electric output per Fuel Type for each period for which the Generating Unit is issued Certificates. Such supporting documentation is subject to audit by state regulators (including the Commission) and the Project's QRE.

5.9.1 Allocating Output for Each Fuel Source

For purposes of creating Certificates reflecting the fuel source mix of Multi-fuel Generation Projects, the proportion of Certificates attributable

⁸ For example, a coal-fired Generating Unit that uses biomass for co-firing can be considered a Multi-fuel Generation Project and have biomass Certificates issued in respect of that biomass-fired generation.



to each Fuel Type shall be determined consistent with the following rules:

For biomass co-fired with fossil fuels or using fossil fuels for startup or supplemental firing: In each month, the Certificates for each Fuel Type in such Multi-fuel Generation Project will be created in proportion to the ratio of the net heat content of each fuel consumed to the net heat content of all fuel consumed in that month, adjusted to reflect differential heat rates for different fuels, if applicable.

5.10 Energy Efficiency Data Requirements

An Electric Power Supplier that is eligible to demonstrate Portfolio Compliance via Energy Efficiency Certificates, or its Utility Compliance Aggregator, shall create a Project in NC-RETS for that purpose. The Electric Power Supplier (or its Utility Compliance Aggregator) shall use the Self-Reporting Interface to create EECs. The Electric Power Supplier or its Utility Compliance Aggregator shall retain for audit work papers demonstrating how it calculated the amount of EECs to be created. Such work papers shall detail for each customer program the estimated volume of customer participation and related energy savings, adjustments for actual operating results (participation and savings rates) and the findings of measurement and verification analyses.

6 Creation of Certificates

Certificates are issued in whole numbers only. Once a Certificate is created, no changes can be made to that Certificate.

6.1 Certificate Creation

The NC-RETS Administrator will issue one Certificate for each MWh of eligible electric energy or 3,412,000 Btu of eligible thermal energy that is generated or electric energy saved by a Project. Certificates are issued based on the number of whole MWh listed in the Generation Activity Log for a given reporting period. Each Certificate shall have a unique Serial Number. Certificate Serial Numbers shall contain codes embedded in the number. The table below identifies the Serial Number format used in NC-RETS.



Identifier	Display Order	Data Type	Length	Range of Codes	Comments
Originating Registry	1	Alpha-numeric	3	NCRETS (WREGIS, ERCOT, GATS, MRETS, MIRECS, NEPOOL & NAR (for Certificate imports)	Used to identify originating registry (especially important for enabling import-exports with other registries)
Unit type	2	Alpha-numeric	4	REC: Renewable Energy Certificate issued for a Renewable Energy Facility or SEPA allocation EEC: Energy Efficiency Certificate issued for an energy efficiency project	Used to identify if the issuance is based on renewable energy generation, energy efficiency project
NC-RETS ID	3	Numeric	6	1 - 999999	NC-RETS Unique ID assigned to each Facility
State	4	Alpha-numeric	2		State Abbreviation identifying the State in which the renewable energy generation occurred. SEPA would be NA. EE or DSM would be NC
Vintage Month	5	Numeric	2	01-12	The month in which the renewable energy and SEPA generation occurred. Not needed for EE and DSM
Vintage Year	6	Numeric	4	2008-2099	The year in which the energy efficiency or renewable energy generation occurred.
Batch Number	7	Numeric	5	Numeric value assigned to the each batch of certificates created 1 - 99,999 unique per source per vintage.	
Serial Block Start	8	Numeric	9	Numeric values assigned by NC-RETS from 1 - 999,999,999.	A number to identify the first certificate in a block of certificates.
Serial Block End	9	Numeric	9	Numeric values assigned by NC-RETS from 1 - 999,999,999.	A number to identify the last certificate in a block of certificates.

TABLE 2: NC-RETS SERIAL NUMBER IDENTIFIERS

6.2 **Process and Timeline for Certificate Creation**

Certificates will not be issued for generation occurring prior to January 1, 2008, and RECs issued in other registries before January 1, 2008, may not be imported into NC-RETS.



Once the generation data (production data as measured by a Qualifying Meter or a Qualifying Estimate) is received by the NC-RETS Administrator and a data validity check is performed, it will post in the Account Holder's "Generation Activity Log" and NC-RETS will notify the Account Holder via email that generation has been posted. The generation posting will be marked "NC-RETS Accepted" on the Generation Activity Log. Once the generation is accepted by the Account Holder, the generation posting will be marked "Account Holder Accepted." The Certificates will issue immediately following this. If the Account Holder takes no action, Certificates will issue in 14 days.

The Account Holder must notify the NC-RETS Administrator if it believes the generation data amount recorded on the Generation Activity Log is inaccurate for any reason. The Account Holder may register a dispute any time after the generation is posted and will have 14 calendar days to do so. While the generation posting dispute is being resolved, the generation posting will be marked "Account Holder Disputed." If the Account Holder does not register a dispute with the NC-RETS Administrator, the Certificates will be created in 14 days.

For Multi-fuel Generation Projects, RECs will not issue until the Account Holder both accepts the generation data and supplies supporting fuel allocation data, as specified in Section 5.9. The Account Holder must submit to NC-RETS the proportion of energy output to be allocated to each Fuel Type. The Account Holder provides the Fuel Type allocation via the Generation Data Review screen located in the Account Holder's Asset Management Module. The fuel allocation information will remain available in NC-RETS for audit purposes. Account Holders must retain for audit the work papers demonstrating how they determined the fuel allocation for each reporting period.

6.3 Certificate Creation for Accumulated Generation

Generation data from Renewable Energy Facilities that have a Nameplate Capacity of 10 kW or less that self-report their output need not be reported monthly and may be accumulated over several months prior to submittal to NC-RETS for Certificate issuance. However, NC-RETS will require the owner to self-report the data in time-increments that do not exceed 3135 days. The vintage on the issued Certificate(s) will be the last month and year of generation contributing to one (1) accumulated MWh.

6.4 Data Fields Carried on Each Certificate

Each Certificate carries a list of data fields. Some of these fields may not be applicable for energy efficiency projects.



TABLE 3: CERTIFICATE DATA FIELDS

DATA FIELD	Comments
CERTIFICATE DATA:	
Certificate Type	REC or EEC
NC-RETS ID	Unique ID assigned to each Project record in NC-RETS.
Project Type	Used to identify if the issuance is based on a Renewable Energy Facility (including SEPA), or Energy Efficiency Project (including demand side management)
Project Name	Name of Project
Certificate Vintage	Vintage of Generation (month/year for RECs; Year for EEC, including DSM)
Certificate Serial Numbers	See details above
Quantity of Certificates	Total Certificates
Meter Data From:	Year-Month-Date
Meter Data To:	Year-Month-Date
Certificate Creation Date:	Date Certificates were issued in NC-RETS
Cost-Recovery Year:	Year of Cost-Recovery
NC REPS Expiration:	Expiration of NC REPS Eligibility
Utility behind project [EEC only]	Name of Electric Power Supplier running the EE/DSM program(s)
STATIC ASSET DATA:	
State or Province	State or Province facility is located in
Country	Country facility is located in
NERC Region	NERC Region facility is located in
eGrid Sub-Region	eGRID Sub-Region facility is located in
Commenced Operation Date	Date the Facility commenced operation
Fuel Type	Fuel Type abbreviation
Nameplate Capacity	Nameplate Capacity of Facility
Reporting Entity Type	QRE or Self-reporting
Reporting Entity Contact Company or Organization name	Name of QRE, if applicable
Utility to which Facility is interconnected	Utility Interconnect
Hydro Upgrade (Y/N)	Denotes whether Facility has been Upgraded
Upgrade Amount: NA	Denotes the portion, if applicable, of facility that has been upgraded and is eligible to create RECs for upgrade amt.
Re-power date (required if Re-powered Indicator = Y)	Date of re-powering
NC In-State/Out-of-State	Facilities eligible for NC and located in NC; Facilities eligible for NC and located outside of NC but with power delivered to any NC utility. If these certificates are transferred out of the utility account, they lose the NC In-State and become Out-of-State; Facilities eligible for NC and located outside of NC



ELIGIBILITY FOR VOLUNTARY PROGRAMS:	
Green-e Energy Eligible ⁹	Denotes eligibility and, if applicable, certification number
LIHI Certified ¹⁰	Denotes eligibility and, if applicable, certification number

7 Certificate Errors and Correction

7.1 Generation Data Validity Check

All generation data received by NC-RETS will undergo an automatic data validity check to ensure that erroneous and technically infeasible data is not entered into NC-RETS and used to issue Certificates. The data validity check will compare reported energy production to an engineering estimate of maximum potential production, calculated as a function of technology type, associated maximum capacity factor, Nameplate Capacity, Fuel Type and time period since the previous cumulative meter reading was entered. If data entered exceeds an estimate of technically feasible generation, the NC-RETS Administrator will be notified and the generation will be posted to the Generation Activity Log noting the status of failed feasibility. The NC-RETS Administrator will contact the Account Holder if the generation data entered is infeasible.

7.2 Certificate Errors Discovered After Certificate Issuance

Once a Certificate is created, no changes can be made to that Certificate. In the event that an error is discovered after Certificates have been issued, the NC-RETS Administrator will contact the Commission to explain the issue. The NC-RETS Administrator and the Commission will determine appropriate action, which could include Retiring Certificates that were created erroneously. (Certificate issuance errors caused by errors made in calculating the relative fuel mix for Multi-fuel Generation Projects will be handled in this manner.) The NC-RETS Administrator may "freeze" Certificates that are implicated in an issuance error until a method of addressing the error is developed. This means that the Certificates cannot be transferred to another Account Holder or Retired until the error is resolved. Certificate issuance errors and their resolution will be logged, and that log made available to the Public Staff and the Commission for audit.

8 NC-RETS Compliance Requirements

Electric Power Suppliers and Utility Compliance Aggregators will make transfers to the Compliance Sub-account to mirror and support their annual Portfolio

⁹ This field is targeted for users who will use NC-RETS for voluntary program certifications.

¹⁰ This field is targeted for users who will use NC-RETS for voluntary program certifications.

Standard compliance filing to the Commission. Certificates in this Sub-account will remain in Active status until the Compliance Sub-account has been reviewed and approved by the Commission. Once approved, the Certificates will be Retired. The Public Staff and the Commission will have access to the Sub-account details.

The process will work as follows:

1) Electric Power Suppliers will establish a Compliance Sub-account for a compliance year using the "Create New Sub-Account" link. Reference Section 2.6 for more details about how Compliance Sub-accounts function. The Electric Power Supplier or Utility Compliance Aggregator will select the relevant compliance type (electric compliance vear and public utilitv or municipality/electric membership corporation) to determine the mandates they have to meet via the given Compliance Sub-account. Utility Compliance Aggregators will need to specify the specific Electric Power Suppliers for which they are reporting, along with the prior year retail sales for each of those Electric Power Suppliers. Utility Compliance Aggregators have the option to create a Compliance Sub-account for each municipality or electric membership corporation separately if they so choose. Or, several Electric Power Suppliers (municipality/electric membership corporations only) can be grouped together for purposes of a Compliance Sub-account.

2) Electric Power Suppliers or Utility Compliance Aggregators can then proceed to transfer Certificates to the Compliance Sub-account(s).

3) From a Compliance Sub-account the Account Holder can access a Compliance Report that displays the quantity achieved and quantity still needed for specific mandates such as solar power, swine waste, and poultry waste, as well as the overall Portfolio Standard mandate, using the mandate requirement reflected in the statute for electric public utilities or municipal utilities/electric membership corporations. The report will also display the proportion of the Certificates that are in-state (including out-of-state RECs bundled with power delivered to NC) and how many are unbundled out-of-state Certificates.

4) When the Account Holder has finished their transfers for the compliance year, they will 'submit' the Compliance Sub-account for Commission review. This will lock the Certificates in place allowing for the Public Staff and Commission to perform their reviews. No changes to this Sub-account can be made by the Account Holder during this time.

5) The Commission will receive an automatic notification that a report has been submitted for their review. After their review the Commission can select to either 'approve' or 'reject' the Compliance Sub-account. Approval will result in the Certificates being Retired permanently in the Compliance Sub-account associated with the given compliance year. Rejection will reopen the Compliance



Sub-account to allow the Account Holder to amend the Compliance Sub-account with the required Certificates after which they can re-submit the Sub-account for Commission review. Status of the Compliance Sub-account can be accessed via the Compliance Reports available to the Account Holder, the Public Staff and the Commission.

9 Public Reports

Public reports will be accessible to anybody via the public page on the NC-RETS website. It is expected that additional public reports will be added to meet future needs of Account Holders and Program Administrators using NC-RETS. Public reports are carefully designed to ensure the confidentiality of Account Holder data per the Terms of Use. See the Terms of Use for more information regarding confidentiality.

- Account Holders. This report contains a listing of all Account Holders with some limited contact information.
- **NC-RETS Projects.** This report contains a list of current and historic facilities by fuel source with owner information, updated daily as needed. It includes a link to each Project's docket within the Commission's website.
- **RECs Issued- Annual Report.** This report will have a drop-down list beginning with 2008. Data for 2010 RECs Issued will not be posted until April 1st 2011. The same will be true with all following years where the data for the previous year is not posted until April 1st. Data to be shown will be an aggregate of RECs issued by fuel type and eligibility.
- EECs Issued- Annual Report. This report will have a drop-down list beginning with 2008. Data for 2010 EECs Issued will not be posted until April 1st 2011. The same will be true with all following years where the data for the previous year is not posted until April 1st. Data to be shown will be an aggregate of EECs issued per utility that performed the energy savings.
- **Public Utility Compliance Report.** Provides details of each utility's Portfolio Standard compliance filed per year.
- **Imported Facilities Report.** Shows all Renewable Energy Facilities which exported Certificates into NC-RETS.
- **Bulletin Board.** Shows RECs which are posted by Account Holders as being available for purchase.

9.1 Account Holder Reports

Account Holder reports for a specific Account will only be accessible to the Account Holder, their designated agents and the NC-RETS Administrator. Account Holders, including all of the Users for an Account, can view up-to-date data in these reports at any time. Current reports include:

- **My Event Log.** This report lists all of the events that have taken place in the Account.
- **My Sub-Accounts.** This provides a list of Certificates held in the Account's Sub-accounts and allows the Account Holder to filter data by specific Active or Retirement Sub-accounts.
- **My Certificate Transfers.** This report provides a comprehensive list of Certificate transfers between Sub-accounts and other Account Holders in NC-RETS.
- **My Recurring Transfers.** This includes transfer details related to Forward Transfers only.
- **My Account Holder Registration History.** This report provides a list of all the changes to the Account Holder registration data.
- **My Project Registration History.** This report provides a list of all the Projects that have been registered in NC-RETS and includes the date of registration, the NC-RETS ID and a link to the Project registration screens.
- **My Generation Activity Log.** This report provides a log of all generation and energy efficiency data loaded into NC-RETS for all of an Account Holder's Projects. It includes both self-reported data and each file uploaded by a QRE.
- **My Generation Report.** This report shows a summary of the data loaded by vintage for each facility.
- **My Compliance Report.** This report provides North Carolina Electric Power Suppliers and Utility Compliance Aggregators the ability to view their Certificates transferred into their Compliance Sub-accounts with built-in calculations to determine if the compliance obligations are being met or not.
- Non-NC REPS Retirement Report. This report captures all voluntary retirement for any Account Holder retiring RECs for reasons other than the Portfolio Standard requirement.



- **Cost Recovery Report.** The Cost Recovery Report is only available to NC Electric Power Supplier Accounts. This report lists all Certificates held in the Account with a checkbox for the Account Holder to select all batches of Certificates to be reported for a cost recovery year.
- **My Invoices.** This report lists all NC-RETS invoices that have been issued to the Account Holder including the amount and payment status. The report also includes payment information.

10 Data Security

The following are a minimum set of security practice requirements for NC-RETS to ensure data integrity and confidentiality:

- (a) Secured web portal interface with password protection for Static Data collection, User access and reporting.
- (b) Restricted access privileges based on participant and User roles using digital certificates.
- (c) Well-defined system backup and recovery processes.
- (d) Secured file transfer and data upload processes using encrypted communications for all data interfaces.

[THE REMAINDER OF THIS PAGE IS LEFT BLANK]



Appendix A: Account Holder Registration Process

The following information will guide you through the steps necessary to create an NC-RETS Account. The NC-RETS Administrator is available to assist you throughout the registration process. Please call (888-378-4461) or email <u>NCRETS@apxenv.com</u>.

STEP 1 – REVIEW NC-RETS OPERATING DOCUMENTS

You should first review the NC-RETS Operating Documents including the Terms of Use, Fee Schedule and Operating Procedures. The documents are on the Documents page (under the Resources tab) on the NC-RETS website (www.ncrets.org).

STEP 2 – ONLINE REGISTRATION

Go to <u>www.ncrets.org</u> and select the "Register for an Account" link. A pop-up window will appear with a checklist describing the steps required to register for an Account. Select the appropriate Account Type and click the "Continue Registration" button.

The available Account Types are:

- North Carolina Electric Power Supplier¹¹
- General Account
- Qualified Reporting Entity
- Program Auditor

STEP 3 – ACCEPT THE TERMS OF USE

Read and agree to the NC-RETS Terms of Use (this is your next step after clicking "Continue Registration"). Acceptance of the Terms of Use must be indicated by reviewing all terms; checking each section; and lastly, agreeing to the Terms of Use by pressing the "I Agree" button.

STEP 4 – COMPLETE ACCOUNT APPLICATION

Upon accepting the Terms of Use, the next screen shows the online New Account Application Form. You will need to complete all required fields that are noted by an asterisk (*). You must designate at least one person, but may designate two, who would receive emails regarding the status of NC-RETS invoices and payments. Note: It will be possible for the public to view the Organization Contact information you provide when your Account is approved by the NC-RETS Administrator.

¹¹ See Page 3 for instructions regarding inputting prior year sales data.

Upon completing the New Account Application Form and clicking "Submit," you will receive an email notification to validate/activate your registration. This activation must occur before the NC-RETS Administrator is notified of your pending Account.

STEP 5 – ACCOUNT REVIEW

The NC-RETS Administrator will review the Account application. If the Account application is complete and approved, an email notification of Account approval will be sent to the designated Account Manager email address provided in the New Account Application Form. If materials are incomplete or additional information is required, the NC-RETS Administrator will notify the Account Manager. Approved Account Holders may begin using all functions of NC-RETS available to their type of Account.

STEP 6 – CREATE SUB-ACCOUNT(S) & ADDITIONAL LOGINS

Upon Account approval, default Sub-accounts are automatically created based on the privileges of your Account type. All NC Electric Service Provider Accounts, and General Accounts will receive one Active, Export and Retirement Sub-account. Additional Sub-accounts can be created and Logins added to an Account.



Appendix B: Project Registration Process

The following information will guide you through the steps necessary to register a Project in your NC-RETS General or North Carolina Electric Power Supplier Account. The NC-RETS Administrator is available to assist you throughout the registration process. Please call 888-378-4461 or email <u>NCRETS@apxenv.com</u>.

STEP 1 – Review NC-RETS Operating Procedures

The NC-RETS operative documents detail the requirements and definitions of different types of Projects. The documents are available on:

www.ncrets.org/resources/documents.

STEP 2 - Register Project

- a. Log in to your Account and from the Manage Projects module, select the "Register New Project" link.
- b. Fill out the information on the New Project Registration page and select "Next."
- c. Continue to fill out the information on the second and third page of the New Project Registration screen and press "Submit."
- d. The NC-RETS Administrator will then be notified of the New Project Registration.
- e. At any time during this process you can save the form and return to complete it at a later time if you do not have all the required information.

Note: Owners of thermal projects will be required to enter their facility's maximum capacity in MW or annual energy production in MWh. To ease the process of registering a new thermal project, owners might want to calculate these conversions prior to starting the registration process.

STEP 3 - Project Review

The NC-RETS Administrator will review the New Project Registration. For an energy project, <u>T</u>the NC-RETS Administrator will compare the registration information to the Commission's order approving the Project as a Renewable Energy Facility. For an energy efficiency project, the NC-RETS Administrator will contact Commission Staff to verify that the electric power supplier is creating a project that is consistent with its REPS compliance plan filed with the Commission. Discrepancies regarding ownership and Project fuel(s) and size will need to be resolved before the Administrator will approve the Registration. If the New Project Registration is complete and approved, an email notification describing account approval is sent to the Account Holder. If materials are

incomplete or additional information is required, the Administrator will notify the Account Manager.

STEP 4 – Certificate Issuance

Certificates can be issued whenever metering data is available and has been communicated to NC-RETS. Metering data must come from a QRE (unless the Project is a Self-Reporting Facility). The Account Holder will receive an email indicating that metering data is available for their review. The Account Holder has 14 days in which to dispute the metering data. If the Account Holder takes no action, Certificates will issue in 14 days. In addition, the Account Holder can immediately approve the data, and Certificates will issue within one day.

All energy efficiency projects (including demand side management for municipalities and electric membership corporations) are self-reporting and can submit the energy savings data once per year to issue Energy Efficiency Certificates. Such Electric Power Suppliers must retain for audit their work papers demonstrating their forecasted energy savings for each program that they operate, and the actual results of those programs, including data from measurement and verification reports filed with the Commission. A group of energy efficiency programs may be treated by an Electric Power Supplier or Utility Compliance Aggregator as one Project within NC-RETS, provided that the Electric Power Supplier or Utility Compliance Aggregator maintains thorough documentation explaining how the net savings (and resulting Energy Efficiency Certificates) were calculated.

Unless otherwise provided, each municipal utility or electric membership corporation (or their Utility Compliance Aggregator) that wants NC-RETS to issue Certificates for their Southeastern Power Administration (SEPA) allocations will need to create a Project in NC-RETS and self-report their monthly SEPA deliveries based on their invoice from SEPA.

STEP 5 – Annual Update of Renewable Energy Facility Registration

Per the Commission's rules, Renewable Energy Facilities must annually provide attestations in order to continue to earn Certificates eligible for compliance with the Portfolio Standard. Each March 1st, March 20th, April 1st and April 15th NC-RETS will send an automated notification reminder to Account Holders that have Projects assigned to them. These notifications will remind the Account Holder of the need to complete the on-line attestation form. The Account Holder will be asked to certify that the Renewable Energy Facility remains in substantial compliance with laws for protecting the environment, that the facility continues to be operated as a Renewable Energy Facility, that Certificates from the facility are not being remarketed and that the Account Holder agrees to the auditing of its books by the Public Staff and the Commission. The facility owner certifies on-line regarding these four statements and provides their name, title, company and

phone number. After April 1, the Account Holder will be forced to complete the attestation in order to continue using NC-RETS. If the Account Holder has not completed the attestation by April 15, NC-RETS will notify the Commission which will consider whether to revoke the Renewable Energy Facility's registration.



Appendix C: Documentation Requirements for Multi-fuel Generation Projects

Upon registering a Multi-fuel Generation Project, the Account Holder must submit to the NC-RETS Administrator a report documenting the methodology it will use to calculate the energy production associated with each fuel used during a month. Following the NC-RETS Administrator's review and acceptance of such a report's methodology, the Account Holder may seek creation of Certificates.

Documentation of the following information used to calculate the proportion of energy output per Fuel Type generated by the Renewable Energy Facility during a billing period must be maintained by Multi-fuel Renewable Energy Facilities for 10 years or as otherwise required by Commission rule.

- 1. Quantities of each Fuel Type used must be documented and must be consistent with those reported to Balancing Authority(s), EPA or state air regulators, if applicable.
- 2. Documentation of net heat content for each Fuel Type (if applicable) must be supported by documentation.
- 3. Specification of a heat rate must be consistent with the heat rate reported to the Renewable Energy Facility's Balancing Authority, if applicable.



Appendix D: NC-RETS Generator Fuel Types

FUEL/PROJECT TYPE		BENEWARIE
(SHORT DESCRIPTION) BAW	FUEL/PROJECT TYPE(LONG DESCRIPTION)	RENEWABLE
BAW	Biomass - Agricultural Solid Waste Biomass - Animal Waste - Other Animal Waste, Solid	Yes
BA3	or Gas	Yes
DAJ	Biomass - Animal Waste - Poultry Waste, Solid or	165
BA2	Gas	Yes
BA1	Biomass - Animal Waste - Swine Waste, Solid or Gas	Yes
BML	Biomass - Combustible Liquids - Other	Yes
	Biomass - Combustible Liquids - Spent Pulping	
BBL	Liquors	Yes
BMC	Biomass - Energy Crop	Yes
BLF	Biomass - Landfill Methane	Yes
	Biomass - Other Biomass, including Combustible	
BMO	Residues	Yes
BIM	Biomass - Other Combustible Gas	Yes
BWW	Biomass - Wood Waste	Yes
CO1	Coal	No
DI1	Diesel	No
GE1	Geothermal	Yes
HYD	Hydropower - Non-SEPA	Yes
H2O	Hydropower - SEPA	Yes
JET	Jet Fuel	No
MSW	Municipal Solid Waste - Non-Renewable	No
NG1	Natural Gas	No
OC1	Ocean/Wave/Current	Yes
OIL	Oil	No
OTH	Other non-renewable fuel	No
SO1	Solar - Photovoltaic	Yes
STH	Solar - Thermal	Yes
STU	Solar – Thermal Unmetered	Yes
TDF	Tire Derived Fuel – Renewable	Yes
TIR	Tire Derived Fuel – Not Renewable	No
WND	Wind	Yes



Appendix E: List of Referenced Documents

NC-RETS Terms of Use NC-RETS Fee Schedule North Carolina Session Laws 2007-397 Commission Rules R8-64 through 69



Appendix F: Compatible Tracking Systems

COMPATIBLE TRACKING SYSTEM	CAN EXPORT CERTIFICATES TO NC-RETS	CAN IMPORT CERTIFICATES FROM NC-RETS	WEBSITE
North American Renewables Registry (NAR)	Yes	Yes	narenewables.apx.com
Midwest Renewable Energy Tracking System (M-RETS)	Yes	<u>No</u>	<u>mrets.org</u>
Western Renewable Energy Generation Information System (WREGIS)	Yes	<u>No</u>	<u>wregis.org</u>
Electric Reliability Council of Texas (ERCOT)	<u>Yes. See</u> Appendix G	No	texasrenewables.com
PJM GATS	No	No	Pjm-eis.com



APPENDIX G: PROTOCOL FOR IMPORTS FROM ERCOT

Step	Process			NC RETS
1		RECs from their ERCOT account to it of NC-RETS) account.	Pending transfer	<u>n/a</u>
2	Form" which include agreement to release 1) <u>REC Quan</u> 2) <u>REC serial</u> 3) <u>REC Vintag</u> 4) <u>Seller acco</u>		Pending transfer	<u>n/a</u>
3	2) <u>APX will cc</u> the NCUC. 3) <u>APX will cc</u> awaiting cc	spond to the Seller in ERCOT that it is infirmation from the Buyer in NC-RETS a Seller in ERCOT aware of any issues		<u>n/a</u>
4	APX will email the I	Export Request Form from the Seller in er in NC-RETS to confirm transaction	Pending transfer	<u>n/a</u>
5	Upon confirmation REC transfer will be NC -RETS) accoun -or- Upon rejection by the transfer will be rejection by the transfer will be transfer	from the Buyer in NC-RETS, ERCOT e accepted in <i>APX, Inc (for benefit of</i> t. and proceed to step 6 ne buyer in NC-RETS, ERCOT REC cted by the <i>APX, Inc (for benefit of</i> . (No further steps needed)	Transfer Accepted – Certificates Active in APX-ERCOT account OR Transfer Rejected – Certificates Active in Seller's account in ERCOT	
6	necessary ¹² , and is	sues RECs in NC-RETS.	Certificates Active in the ERCOT APX, Inc. Account	<u>Issued in</u> APX's NC-RETS account
7	NC-RETS Admin tr NC-RETS	ansfers RECs to the buyer in	Certificates Active	Certificates Pending transfer
8	Buyer in NC-RETS	accepts transfer.	Certificates Active	Transfer Accepted

¹² If this is the first import of RECS from the facility, an import project will need to be created in NC-RETS. The projects are created once in the NC-RETS administrator account and stay there. After being created once, they do not need to be created for each future transaction.



APX retires Certificates in ERCOT, APX, Inc (for benefit of NC-RETS) account with the following details: Export to NC RETS [Exporter] [Importer][Date]	Retired	Certificates Active in Buyer's NC-RETS account
		<u>Certificates</u> <u>Active</u>



NORTH CAROLINA RENEWABLE ENERGY TRACKING SYSTEM OPERATING PROCEDURES

January 31, 2011

Disclaimer: This document is intended to guide the operations of NC-RETS, both the users of the system and its administrator, APX. It is intended to be consistent with the NC Utilities Commission's rules implementing North Carolina's Renewable Energy and Energy Efficiency Portfolio Standard. Please contact Commission Staff if you believe there is a conflict between these Operating Procedures and the Commission's rules. NC-RETS users can propose changes to these procedures by participating in the NC-RETS Stakeholders Group.

Table of Contents

Gl	ossa	ary	iii
1	Int	troduction	1
2	N	C-RETS User Registration	1
		Participation in NC-RETS Establishing an Account Deposits to Active Sub-Accounts Transfers from Active Sub-Accounts Retirement Sub-Accounts Compliance Sub-Accounts Transfers between Accounts Compatible Tracking Systems	2 5 6 6 7 7 8
3	Ac	ccess to Accounts and Confidentiality	9
	3.2	Account Access Levels of Account Access	10 10 10
4	Pr	oject Registration	10
	4.1 4.2 4.3 4.4 4.5 4.6 4.7	Registering a Project Multi-fuel Renewable Energy Facility Project Verification of Static Data Submitted During Project Registration Updating Static Data Misrepresentation of Static Information Terminating a Project's Participation in NC-RETS Changing the Account (Owner) with which a Project is Associated	12 12 13 13 14
5	Dy	namic Data in NC-RETS – Generation Data – Role of Qualified Reporting	
En	tity		15
	5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8	Qualified Reporting Entity (QRE) Guidelines Generation Data Requirements Measurement of Generation and Adjustments Prior Period Adjustments Notification of Adjustments Data Collection Procedure Special Requirements for Self-Reporting Generators Only Generation Activity Log	17 19 20 20 20 20 20

APPENDIX E



 5.9 Multi-fuel Generation Projects	23
6 Creation of Certificates	
 6.1 Certificate Creation	24 25
7 Certificate Errors and Correction	27
 7.1 Generation Data Validity Check	
8 NC-RETS Compliance Requirements	28
9 Public Reports	29
9.1 Account Holder Reports	30
10 Data Security	31
Appendix A: Account Holder Registration Process	32
Appendix B: Project Registration Process	34
Appendix C: Documentation Requirements for Multi-fuel Generation Projects	37
Appendix D: NC-RETS Generator Fuel Types	38
Appendix E: List of Referenced Documents	39
Appendix F: Compatible Tracking Systems	40
Appendix G: Protocol For Imports From ERCOT	41

Glossary

Account: An Account is the vehicle by which an individual or an organization participates in NC-RETS and uses the system to upload Renewable Energy Facility production data, or to create, hold, track and/or retire RECs in Sub-accounts, or to audit an Electric Power Supplier's compliance with North Carolina's Portfolio Standard. There are four Account types in NC-RETS: NC Electric Power Supplier, General, Qualified Reporting Entity, and Program Auditor.

Account ID: A unique NC-RETS identifier for an Account that is assigned by NC-RETS when the NC-RETS Administrator approves the Account in NC-RETS.

Account Holder: An Account Holder is a person or organization that has registered with NC-RETS and has established an Account in order to own RECs in NC-RETS, provide Renewable Energy Facility production data to NC-RETS, or audit a compliance program within NC-RETS.

Account Manager: An Account Manager is the administrator for an Account Holder's NC-RETS Account, having the ability to, among other things, setup and manage additional logins and login privileges for other Users, typically other employees of the same organization.

Active Certificates: An Active Certificate is a Renewable Energy Certificate or Energy Efficiency Certificate that is held in an Active Sub-account and that has not yet been retired. Such Certificates may be traded, transferred, exported or retired at the discretion of the Account Holder of the Active Sub-account, except that Energy Efficiency Certificates can be used for compliance with North Carolina's Portfolio Standard only by the Electric Power Supplier that produced them or by a group of affiliated Electric Power Suppliers using the same Utility Compliance Aggregator.

Active Sub-account: An Active Sub-account is a Sub-account of an Account Holder's Account and is the holding place for all Active Certificates. If the Account Holder is the owner of a Renewable Energy Facility, or is the Responsible Party of a Renewable Energy Facility, their Active Sub-account will be the first point of deposit for any Certificates created that are associated with the Project ID number, unless the Certificate is subject to a Forward Certificate Transfer. Similarly, if the Account Holder is an Electric Power Supplier that operates an energy efficiency program, the related Certificates are created in an Active Sub-account. An Active Sub-account may be associated with one or more Projects.

Balancing Authority: The entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority area,



and supports interconnection frequency in real time. Duke Energy and Progress Energy are the Balancing Authorities for most of North Carolina. PJM is the Balancing Authority for Dominion North Carolina Power's service area.

Bulletin Board Sub-account: The Bulletin Board Sub-account is an Active Sub-account of an Account Holder's Account and is the holding place for Active Certificates that the Account Holder has posted for sale on the Bulletin Board.

Certificate: NC-RETS issues two kinds of Certificates: Renewable Energy Certificates (RECs), and Energy Efficiency Certificates (EECs). Unless otherwise specified by statute, rule or NCUC order, NC-RETS will issue one Certificate for each MWh of energy produced by a Renewable Energy Facility or saved via an Electric Power Supplier-sponsored energy efficiency or demand-side management program. Certificates from Renewable Energy Facilities that are Multi-fuel Facilities shall be issued pursuant to Section 4.2.

Commission: The Commission is the North Carolina Utilities Commission.

Compliance Sub-account: A Sub-account used by an Electric Power Supplier or Utility Compliance Aggregator to demonstrate compliance with a specific year of Portfolio Standard obligation(s). The Account Holder places Certificates into the Compliance Sub-account, which is then audited by the Public Staff. Once the Commission has approved the Account Holder's compliance with the Portfolio Standard, the RECs are retired.

Creation Date: The date (DD/MM/YYYY) that a Certificate is created. Certificates are created upon acceptance of production data by the Account Holder, or if the production data passes all system validations, the Certificates will automatically create fourteen (14) days after the production data was uploaded into NC-RETS.

Customer-Sited Distributed Generation: A Renewable Energy Facility that is interconnected behind a retail customer meter and therefore not directly interconnected with either the distribution system or transmission system (including net metered facilities).

Directory of Account Holders: The Directory of Account Holders is a listing of all Account Holders registered with NC-RETS. This directory includes limited information for contacting each Account Holder and is available to the public via the NC-RETS website.

Directory of Renewable Energy Facilities and Energy Efficiency Projects: This is a listing of all approved Projects within NC-RETS. **Dynamic Data:** Dynamic Data is variable information that is associated with a specific MWh produced or saved by a Project, such as Certificate Serial Number or Creation Date.

Electric Power Supplier: An organization that sells electricity to retail end users, such as investor-owned utilities, municipal utilities, and electric membership corporations. All Electric Power Suppliers in North Carolina must comply with the State's Portfolio Standard, although the requirements vary slightly for investor-owned utilities versus municipal utilities and electric membership corporations.

Forward Transfer: A transfer of Certificates arranged in advance to be effectuated on a specific future date.

Fuel Type: The kind of fuel or source of energy used to produce electric or thermal energy at a Renewable Energy Facility. See Appendix D for a list of eligible Fuel Types. This list was established by the North Carolina General Assembly when it enacted NC's Portfolio Standard.

General Account: This type of Account can hold, transfer (outgoing and incoming), and Retire Certificates for voluntary (non-compliance) reasons. This kind of Account can also open a Sub-account where RECs are created for a Renewable Energy Facility.

Generation Activity Log: The Generation Activity Log is an electronic ledger where energy production from Renewable Energy Facilities and energy saved by Electric Power Supplier energy efficiency programs is posted prior to Certificate creation. Each time production or savings data is received by NC-RETS for a particular Project, the date and quantity of qualifying MWhs produced or saved is posted to the Generation Activity Log. Adjustments received are posted likewise.

Inbox: Certificate transfers to an Account Holder are first posted in the Account Holder's Inbox. The Account Holder then either accepts or rejects the transfer. Upon acceptance, the Certificates are deposited in the Sub-account designated by the Account Holder.

Megawatt-hour (MWh): One thousand kilowatt-hours or 1 million watt-hours of energy. One MWh of energy produced by a qualifying fuel at a Renewable Energy Facility is required to create one Renewable Energy Certificate. One MWh of energy saved by an Electric Power Supplier's energy efficiency or demand side management project is required to create on Energy Efficiency Certificate.

Multi-fuel Facility or Generation Project: A Renewable Energy Facility that produces energy using more than one Fuel Type and might partially rely on a fuel that does not qualify for issuance of Certificates. See Section 4.2 below.



Nameplate Capacity: The maximum rated output of a generator, prime mover or other electric power production equipment under specific conditions designated by the manufacturer. Size classification in Megawatts (MW) is based on Nameplate Capacity.

NC-RETS Administrator: The NC-RETS Administrator is the entity under contract with the Commission to implement the NC-RETS Operating Procedures. The Commission selected APX to be the NC-RETS Administrator. The NC-RETS Administrator confers with Commission Staff, which seeks Commission concurrence, for exceptions to the NC-RETS Operating Procedures.

North Carolina Electric Power Supplier Account: This type of Account can hold, transfer (outgoing and incoming), and Retire Certificates. A North Carolina Electric Power Supplier Account can also register and maintain Projects and have Certificates issued to it for its Projects. A North Carolina Electric Power Supplier Account is the only kind of Account that can retire Certificates for compliance with NC's Portfolio Standard.

Outbox: After initiating a Certificate transfer, an Account Holder will see the Certificates in its Outbox. The Account Holder to whom the Certificates have been transferred will either accept or reject the transfer. If rejected, the Certificates will be returned to the Active Sub-account from which they were transferred. If accepted, the Certificates are transferred to the receiving Account Holder.

Portfolio Standard: The law enacted by North Carolina's General Assembly via Session Law 2007-397 that requires all Electric Power Suppliers serving retail customers in North Carolina to meet an increasing portion of their customers' electricity needs from renewable energy and conservation.

Prior Period Adjustment: An addition or subtraction made to a current Certificate issuance in order to correct for an under- or over-issuance of Certificates made in error in a prior period, most commonly due to inaccurate metering data.

Program Auditor Account: North Carolina regulators will use this Account to review Compliance Sub-accounts submitted by North Carolina Electric Power Suppliers and Utility Compliance Aggregators, as well as to view NC-RETS reports.

Project: A Project is either a Renewable Energy Facility or an Electric Power Supplier's qualifying energy efficiency programs (including demand-side management for municipalities and electric membership corporations).



Project ID: A unique NC-RETS identifier for a Project that is assigned by NC-RETS when the NC-RETS Administrator approves a Project for Certificate issuance in NC-RETS.

Project Name: Project Name is the name assigned to a Project when it is registered in NC-RETS.

Public Staff: The State agency charged with investigating Electric Power Supplier compliance with North Carolina's Portfolio Standard (among other things) and representing the using and consuming public in proceedings before the Commission.

Qualified Reporting Entity (QRE) Account: This Account type should be used for an NC-RETS Account Holder that reports meter readings and other generation data to the NC-RETS Administrator. Qualified Reporting Entities include Balancing Authorities, Electric Power Suppliers, a federal power agency or a municipal power agency. A QRE Account is assigned to each Project (except for those that are allowed to provide Qualified Estimates and Self-Reporting Facilities) and it is responsible for providing the Project's energy production information. NC-RETS tracks the specific Projects for which a QRE provides production information. A QRE Account cannot hold Certificates.

Qualifying Estimates: These are electric production estimates, based on generally accepted analytical tools such as PV Watts (www.pvwatts.com) for inverter-based solar photovoltaic Renewable Energy Facilities with a Nameplate Capacity of 10 kW or less. The facility owner shall document such estimates and retain such documentation for audit by the Commission and the Public Staff. Qualifying Estimates may be used to issue RECs in NC-RETS.

Qualifying Meter: This is a meter that provides energy production data of sufficient quality that it can be relied upon for the issuance of Certificates. For a Renewable Energy Facility that is interconnected to a Balancing Authority, it is the meter or data source that is used by the Balancing Authority for settlements. For Renewable Energy Facilities that are interconnected to an Electric Power Supplier's distribution system, it is the meter supplied by and read by the Electric Power Supplier. For a Renewable Energy Facility that is interconnected behind an Electric Power Supplier's meter at a customer's location, a Qualifying Meter can either be 1) an ANSI-certified meter that may be read and self-reported by the owner of the Renewable Energy Facility who shall comply with the Commission's meter testing requirements pursuant to Commission Rule R8-13; or 2) another industry-accepted, auditable and accurate metering, controls and verification system. For a combined heat and power system or solar thermal energy facility that has been approved by the Commission as a Renewable Energy Facility, the facility's useful thermal energy (excluding energy used to produce electricity) may be measured by an industry-accepted meter for



measuring British thermal units (Btu). NC-RETS shall issue one Certificate for every 3,412,000 Btu of qualifying thermal energy.

Qualifying MWh: Energy that is produced by a Renewable Energy Facility via a fuel source or technology that qualifies it for the NC Portfolio Standard.

Renewable Energy Certificate (REC): See Certificates.

Renewable Energy Facility: An energy production facility that has been approved by the Commission as eligible to have some or all of its output count toward NC's Portfolio Standard. The owner of such a Facility located in North Carolina is eligible to register that Facility in NC-RETS, where Certificates are issued for qualifying energy production.¹

Responsible Party: An Account Holder who has been assigned the registration rights for a given Project. This assignment occurs outside of NC-RETS and gives the designated Account Holder *full and sole* management authority over the transactions and activities related to the Project within NC-RETS.

Retirement Sub-account: A Retirement Sub-account is used as a repository for Certificates that the Account Holder wants to designate as Retired and remove from circulation. Once a Certificate has been transferred into a Retirement Sub-account, it cannot be transferred again to any other Sub-Account.

Retirement of Certificates or **Retirement/Retire:** Retirement of Certificates is an action taken within NC-RETS to permanently remove a Certificate from circulation. There are two types of retirement: voluntary or compliance. Retirement may be initiated only by the Account Holder for Certificates in his/her own Sub-accounts. Voluntary retirement is effectuated by transferring Certificates into a Retirement Sub-account. For Electric Power Suppliers, compliance retirement occurs when RECs are placed into a Compliance Sub-account, and submitted for review to the Commission. RECs associated with an approved Compliance Sub-account are placed into retirement by Commission action.

Self-Reporting Facility: This is a Renewable Energy Facility or utility-sponsored energy efficiency or demand-side management Project for which the owner self-reports its output or energy savings. This includes 1) a customer-sited Renewable Energy Facility interconnected behind an Electric Power Supplier's meter that has either 1) a meter that meets ANSI standards and complies with Commission Rule R8-13, or 2) another industry-accepted, auditable and accurate metering, controls and verification system; 2) inverter-based solar facilities of 10-kW or less; 3) solar thermal facilities; and 4) combined heat and power

¹ The owner of a Renewable Energy Facility that is located in South Carolina, which has its meter read by a NC Electric Power Supplier, may also register the Project in NC-RETS for the issuance of RECs.



facilities. Self-Reporting Facilities transmit their production data to the NC-RETS Administrator via the Self-Reporting Interface pursuant to Section 5.7.

Self-Reporting Interface: This is a standard internet-based data entry portal that serves as the method for a Self-Reporting Facility, including energy efficiency and demand-side management Projects, to communicate dynamic data to the NC-RETS Administrator pursuant to Section 5.7.

Serial Number: NC-RETS assigns a Serial Number to each Certificate that it issues. The Serial Number contains embedded codes that explain when it was issued.

Static Data: Static Data describes the attributes of a Project and includes information related to the characteristics of the Renewable Energy Facility such as technology type, ownership and location.

Station Service: Station Service is the portion of electricity or thermal energy produced by a Renewable Energy Facility that is immediately consumed at that same facility in order to power the facility's pumps, etc., or to process fuel. Such energy is not eligible for issuance of Certificates.

User: Any person who has been granted access by an Account Holder to "use" its Account in NC-RETS, which may include viewing information, performing transactions and changing personal information. The Account Holder may at any time revoke the permissions granted to a User by notifying the NC-RETS Administrator. NC-RETS tracks the specific activities of each User through their unique login and password.

Utility Compliance Aggregator: An organization that assists an Electric Power Supplier or group of Electric Power Suppliers in demonstrating its compliance with NC's Portfolio Standard.

1. Introduction

The Commission established the North Carolina Renewable Energy Tracking System (NC-RETS) to issue and track Renewable Energy Certificates (RECs) and Energy Efficiency Certificates (EECs). NC's electric utilities use NC-RETS to demonstrate compliance with the State's Portfolio Standard established under Session Law 2007-397. Renewable energy producers may register their facilities with the Commission. If approved, they can use NC-RETS to create RECs that meet the requirements of NC's Portfolio Standard.

NC-RETS uses verifiable energy production data from participating facilities to create one digital Certificate for each MWh (or thermal equivalent) generated from renewable energy. Electric Power Suppliers and Utility Compliance Aggregators use NC-RETS to track the results of qualifying energy efficiency and demand-side management customer programs operated by Electric Power Suppliers. NC-RETS and all related energy production and customer program records are audited by the Public Staff of the North Carolina Utilities Commission. NC-RETS will integrate with all other REC tracking systems in the United States to allow for the import and export of RECs to and from North Carolina.

2. NC-RETS User Registration

2.1 Participation in NC-RETS

Any party is eligible to participate in NC-RETS, which means that any person can own RECs and track them in NC-RETS. NC-RETS includes many reports and links that are available to the general public. The Public Staff and the Commission use NC-RETS to audit compliance with NC's Portfolio Standard.

Electric Power Suppliers (or their Utility Compliance Aggregators) must use NC-RETS to demonstrate their compliance with NC's Portfolio Standard. An Electric Power Supplier establishes an Account in NC-RETS to hold RECs, including those that they acquire or generate and those associated with allocations from the Southeastern Power Administration (SEPA). Similarly, an Electric Power Supplier uses NC-RETS to document and track eligible energy savings via Energy Efficiency Certificates (EECs) from its qualifying energy efficiency and demand-side management programs. Each year, starting in 2011 for the 2010 compliance year, Electric Power Suppliers and Utility Compliance Aggregators will move RECs and EECs into a Compliance Sub-account, which will be audited to determine whether the organization

complied with the Portfolio Standard.² Once the Commission determines that the organization has complied, those RECs will be permanently Retired, meaning they cannot be sold or reused for compliance.

NC-RETS issues and tracks Certificates originating from NC's Projects registered in NC-RETS and also tracks those Certificates that are imported into NC-RETS from other tracking systems in the United States. Organizations that operate Renewable Energy Facilities located in North Carolina and that want RECs associated with their facilities' output to be eligible to count toward NC's Portfolio Standard must participate in NC-RETS.³ They use NC-RETS to create an Account for each facility where production data (meter readings or self-reported data, depending on the facility's size) or other criteria are uploaded, and RECs are issued. After arranging to sell RECs to a North Carolina Electric Power Supplier or Utility Compliance Aggregator, they will be able to use NC-RETS to transfer those RECs to the purchaser. In addition, NC-RETS has a Bulletin Board where they can post RECs that they would like to sell.

Utility organizations that read the production meters for any Renewable Energy Facilities located in North Carolina use NC-RETS to provide those meter readings on an on-going basis. NC-RETS uses those meter readings to create one REC for each qualifying MWh of energy produced by a Renewable Energy Facility.⁴

Balancing Authorities (Duke Energy and Progress Energy) that provide energy balancing and accounting at the transmission level, use NC-RETS to upload monthly production data for Renewable Energy Facilities that are interconnected to their transmission systems.

2.2 Establishing an Account

Any person or entity wanting to participate in NC-RETS must establish an Account. Accounts should be established in accordance with the timeline for certificate creation (see Section 6.2) to ensure Certificate eligibility.

² Some municipal utilities and electric membership corporations (EMCs) have contracted with a power agency, GreenCo Solutions, Duke Energy, or Progress Energy, to act as a Utility Compliance Aggregator that will manage and report compliance with the Portfolio Standard on behalf of that municipal utility or EMC.

³ If a facility already participates in PJM's Generation Attribute Tracking System (GATS), it does not need to also participate in NC-RETS. This may be the case if the facility is located in Dominion's service territory.

⁴ "Qualifying MWh" is one that was produced by a fuel that qualifies under Session Law 2007-397 at a facility that has been registered with the Commission as a Renewable Energy Facility. NC-RETS does contain the functionality to apply multipliers in exceptional cases such as the Duke off-shore wind turbines, where one MWh will create more than one REC.



Registrants will provide basic Account registration information, such as Account Holder name, address and contact information, to the NC-RETS Administrator through a secure web-page on the NC-RETS website⁵ and agree to the Terms of Use. (The Terms of Use are available for review on the NC-RETS website, <u>www.ncrets.org</u>, under "Documents.") See Appendix A for step-by-step instructions. The NC-RETS Administrator reviews the Account application and may request more information before approving or rejecting the application. An Account remains active until terminated. Termination can be initiated by the Account Holder by notifying the NC-RETS Administrator. Accounts can also be terminated if an Account Holder fails to pay the NC-RETS fees or is otherwise in default under the Terms of Use. The Terms of Use describe these issues, as well as additional important terms, and should be read and understood by anyone applying to be an Account Holder.

Account Types and Sub-Account Structure

There are four (4) types of Accounts in NC-RETS:

• North Carolina Electric Power Supplier Account: This type of Account can hold, transfer (outgoing and incoming), and Retire Certificates. A North Carolina Electric Power Supplier Account can also register and maintain Projects and have Certificates issued to it for its Projects, including energy efficiency and demand side management programs. A North Carolina Electric Power Supplier Account is the only type of Account that can retire Certificates for compliance with NC's Portfolio Standard. An organization that provides compliance services for another Electric Power Supplier is called a Utility Compliance Aggregator. Only Electric Power Suppliers and Utility Compliance Aggregators are eligible to establish a North Carolina Electric Power Supplier Account.

In 2010, when North Carolina Electric Power Suppliers (and Utility Compliance Aggregators) first register to open an Account in NC-RETS, they will be required to input (on the Account registration screen) their organization's 2009 North Carolina retail sales (in MWh). As soon as NC-RETS generates the Account Holder's first NC-RETS bill on September 1, 2010, the Account Holder's "prior year retail sales" field will be locked. NC-RETS will use the locked sales data to calculate bills from September 2010 through June 2011. In June of 2011 and each subsequent year, the Account Holder must enter the "prior year's retail sales" data. Each July NC-RETS will use the new sales data to calculate monthly bills for North Carolina Electric Power Suppliers. For more details, please refer to the Fee Schedule, which is on-line at www.ncrets.org.

⁵ <u>http://www.ncrets.org</u>



• **General Account:** This type of Account can register Projects and have RECs issued to it for its Projects. (Before creating Certificates in NC-RETS, a Renewable Energy Facility must first register with the Commission.) A General Account can hold, transfer, and Retire Certificates (for reasons other than compliance with NC's Portfolio Standard). The Account Holder for a Renewable Energy Facility Project can seek eligibility for its facility with Green-e Energy or Low-Impact Hydro Institute (LIHI). If accepted by those organizations, NC-RETS can indicate such eligibilities on Certificates issued for output from the facility.

• Qualified Reporting Entity (QRE) Account: An Account Holder with a QRE Account is assigned to a Project and is responsible for providing energy production information such as monthly meter readings for that Project. A QRE Account cannot hold Certificates. The QRE uses its NC-RETS Account to upload meter reads or monthly settlement data for each Project to which it is assigned. An Electric Power Supplier should have a QRE Account if it reads the production meter for Renewable Energy Facilities, or if it is a Balancing Authority.

• **Program Auditor Account:** This type of Account will allow Commission and Public Staff to perform compliance review and auditing of program data as needed.

Accounts that can hold Certificates (North Carolina Electric Power Supplier and General Accounts) are given three types of Sub-accounts automatically by default when their Account is approved (Active, Retirement and Export Sub-accounts). An Active Sub-account is used to organize Certificates based on an organization's business structure as desired. The default Retirement Sub-account is used to Retire Certificates for voluntary reasons (that is, reasons other than compliance with NC's Portfolio Standard). The Export Sub-account is used to transfer Certificates to another tracking system. The Account Holder has the ability to rename these default Sub-accounts and create as many additional Active and Retirement Sub-accounts as necessary to meet their organization's needs. Retirement Sub-accounts cannot be renamed if they hold Certificates. When Certificates are issued, they are placed into an Active Sub-account that was designated when the Project was registered with NC-RETS. When an incoming Certificate transfer is pending, the recipient Account Holder identifies the Active Sub-account into which the Certificates will be deposited. Each Account Holder will be able to view a listing of Certificates held in each Sub-account and their attributes (e.g. static Project details, eligible program certifications and Certificate origination details).

Accounts that can hold Certificates also have a single Bulletin Board Sub-account, used to post Certificates for sale on the NC-RETS Bulletin Board.

Each Account and Sub-account has a unique identification number. For ease of reference, Account Holders may attach aliases to Sub-accounts (e.g., by customer or by product name).

North Carolina Electric Power Suppliers and Utility Compliance Aggregators will have the ability to create Compliance Sub-accounts. Compliance Sub-accounts can only be used to Retire Certificates for the Portfolio Standard. A Compliance Sub-account is established for a specific compliance year, and the Account Holder must designate whether the Sub-account is subject to the compliance obligations of an electric public utility or the compliance obligations of a municipality / electric membership corporation or a group of municipalities / electric membership corporations.

2.3 Deposits to Active Sub-Accounts

There are four ways that Certificates are deposited into an Active Sub-account.

- (e) Within an Account, Certificates can be transferred from one Active Sub-account or Bulletin Board Sub-account to another.
- (f) An Account Holder can accept a transfer of Certificates from another Account Holder.
- (g) Certificates can be generated by a Project and deposited by the NC-RETS Administrator into the Sub-account assigned to the Project.
- (h) Certificates can be transferred into a Compliance Sub-account prior to the Compliance Sub-account being submitted for review by the Commission and Public Staff.

2.4 Transfers from Active Sub-Accounts

There are two ways to withdraw or remove Certificates from Active Sub-accounts:

- (c) Transfer the Certificates to the Sub-account of another Account Holder.
- (d) Transfer the Certificates to another of the Account Holder's own Sub-accounts (Active, Retirement, Export, Compliance, or Bulletin Board Sub-account).

Certificates that have been deposited in a Compliance Sub-account cannot be moved out of that Sub-account once the Electric Power Supplier or Utility Compliance Aggregator submits the associated Portfolio Standard Compliance Report to the Commission for review.

2.5 Retirement Sub-Accounts

A Retirement Sub-account is used as a repository for Certificates that the Account Holder wants to designate as voluntarily retired. There are three ways that Certificates are deposited in a Retirement Sub-account:

- (d) Within an Account, Certificates can be transferred from an Active Sub-account or a Bulletin Board Sub-account to a Retirement Sub-account.
- (e) An Account Holder can accept a transfer of Certificates from another Account Holder directly into a Retirement Sub-account.
- (f) Certificates can be transferred from a Compliance Sub-account to a Retirement Sub-account prior to the Compliance Sub-account being submitted for review by the Commission and Public Staff.

An Account Holder choosing to retire a Certificate or a block of Certificates will use the transfer screen to identify the quantity of Certificates to Retire and the reason for Retirement. The Account Holder must select the Retirement Sub-account to which the Certificates will be deposited. The Retirement Sub-account will show the Serial Numbers of the Certificates Retired, the date of Retirement and the reason for Retirement. In addition, there will be a mechanism to view the Project characteristics and Certificate fields associated with the Retired Certificates. *Once Certificates are Retired, they cannot be moved or transferred out of the Retirement Sub-account to any other Sub-Account or Account Holder.*

NC-RETS validations ensure that Certificates deposited in a Retirement Sub-account are no longer transferable to another party or another Sub-account. NC-RETS reports allow Account Holders to show evidence of the Retirement.

2.6 Compliance Sub-Accounts

A Compliance Sub-account will be available to North Carolina Electric Power Suppliers and Utility Compliance Aggregators only. These entities can have one electric public utility Compliance Sub-account per compliance year and an unlimited number of municipal utility / electric membership corporation type of Compliance Sub-accounts per year. For example, for 2010, an Electric Power Supplier can have one Compliance Sub-account for itself (as an electric public utility) and 1 or more for each municipality/coop or group of such electric power suppliers for which it provides compliance reporting. Each Compliance Sub-account will be subject to the statutory requirements for either: 1) an electric public utility, or 2) a municipal utility/electric membership corporation (cooperative). Certificates in a Compliance Sub-account will be in a "pending retirement status" while the State Program Auditor/Regulator accesses it via a compliance report for audit. When that review and the related regulatory proceeding are complete, the Commission will use NC-RETS to finalize Retirement of the Certificates into a permanent Retirement status. State Program Auditors will see the related Compliance Report from their own Accounts.

There are two ways that Certificates are deposited into a Compliance Sub-account:

- (c) Within an Account, Certificates can be transferred from an Active Sub-account or a Bulletin Board Sub-account to a Compliance Sub-account.
- (d) An Account Holder can accept a transfer of Certificates from another Account Holder directly into a Compliance Sub-account.

The NC-RETS Administrator is not responsible for the Retirement of Certificates by Account Holders, as it relates to voluntary or compliance-related Retirement deadlines or otherwise.

2.7 Transfers Between Accounts

North Carolina Electric Power Supplier and General Account Holders may transfer Active Renewable Energy Certificates to other Account Holders. Certificates will be specified by their Serial Numbers. The Account Holder will select the recipient from a pull-down list of Account Holders. After the transfer has been initiated, the Certificates that are pending transfer will be marked as "transfer pending" in the Account Holder's Outbox. This will have the effect of "freezing" the Certificates so that they cannot be moved to another Sub-account or to another Account Holder.

After the transfer has been initiated, NC-RETS will send an electronic notification of the request to transfer Certificates to the proposed recipient. The transfer recipient can review the Certificate transfer details from the Account Holder's Outbox and must confirm or reject the transfer within fourteen (14) calendar days of when it was requested by the transferor. If rejected, the Certificates will be deposited back into the originating transferor's Sub-account. If confirmed, the transfer recipient must designate the Sub-account to which the Certificates are to be delivered. As soon as the recipient has confirmed or rejected the transfer, NC-RETS will send an electronic notification to the transferor indicating the action taken. The transferor may cancel any transfer before such transfer has been confirmed by the recipient by withdrawing the transfer from the Account Holder's Outbox in NC-RETS. If the transfer is withdrawn, NC-RETS will notify the recipient of the action.

2.8 Compatible Tracking Systems

NC-RETS is set up to accept transfers of eligible Certificates from compatible tracking systems. A compatible tracking system is a system that has set-up up a process with NC-RETS on how to handle imports and/or exports and

implemented the required technology. NC-RETS is working towards setting up imports and exports with all registries that track generation from facilities that have been approved by the NC Commission. Appendix F lists the compatible tracking systems at the time of NC-RETS launch. This list is also posted at <u>www.ncrets.org</u> and will be updated as more registries are deemed to be compatible.

2.8.1 Imports from other Tracking Systems

Only Certificates from facilities and fuel types that have been approved by the Commission can export Certificates to NC-RETS. In order to import a Certificate from another tracking system the Account Holder in the exporting tracking system will need to follow that tracking system's procedures for an export. This generally includes designating a specific batch of Certificates for export and designating the importing registry (i.e. NC-RETS) and the importing NC-RETS Account Holder (Account ID and name).

The NC-RETS Account Holder will see the imported Certificates in their Inbox module. Under the "From" column, the registry from which the RECs are coming will show in the Inbox module. The Certificate transferor will be the NC-RETS Administrator.

The imported Certificates will have a unique Serial Number that references the originating registry instead of NC-RETS. The Certificate data screen will also contain the original Serial Number from the issuing registry. All Projects from which Certificates have been imported into NC-RETS will be listed on the public 'Imported Facility Report.' No information about the quantity transferred and the parties involved in the transaction will be publicly posted.

Tracking systems track fuel types differently. Certificates in NC-RETS will issue with the fuel types used by NC-RETS and that correspond to fuel types approved by the Commission.

2.8.1.1 Multi-fuel Facilities that use Swine and/or Poultry Waste

Only NC-RETS and the North American Renewables Registry (NAR) currently can track swine waste and poultry waste Certificates separately from other kinds of biomass used in a Multi-fuel Facility. If a NC-RETS Account Holder is planning to import Certificates from a Project that is (1) registered in a tracking system other than NAR, and, (2) using more than one type of biomass, and, (3) where one or more of the fuels is swine and/or poultry waste, then additional procedures are needed to correctly differentiate swine and/or poultry waste Certificates from other biomass Certificates. NC-RETS

Account Holders contracting for such Certificates should contact the NC-RETS Administrator before the export is initiated from the exporting tracking system. The NC-RETS Administrator and the Commission will ask the NC-RETS Account Holder for Project specific information (i.e. fuel deliveries, generation data etc.) needed to substantiate that swine and/or poultry waste generated the energy associated with the RECs.

If the Project only uses one biomass fuel (i.e. swine waste or poultry waste) the above procedure is not needed.

2.8.2 Exports to other Tracking Systems

In order to export a Certificate to another tracking system the NC-RETS Account Holder will designate a specific batch of Certificates for export and designate the registry and Account Holder (Account ID and Name) to whom the Certificates should be delivered.

After the transfer has been initiated, it will show up in the NC-RETS Account Holder's Outbox module as "Pending." It will remain "Pending" until the NC-RETS Administrator confirms that the Certificates are eligible for export to the importing tracking system.

3 Access to Accounts and Confidentiality

3.1 Account Access

An Account Manager is established as part of the Account registration process. The individual listed in the initial Account application will be considered the Account Manager and have the ability to setup and manage any additional User logins and login privileges for his or her organization. The Account Manager will have full access to the organization's Account. The Account Manager can customize login permissions to allow view-only access to information or to allow the User to perform activities such as transfers and submitting/updating information. Such privileges can also be further attached to specific Sub-accounts or Projects. This provides Account Holders with significant flexibility when assigning Users to specific tasks or roles. User login setup can be done during the Account registration process or at any time the Account Manager wishes to add Users to the Account. The Account Manager supplies contact information for each User and designates their login name and password.

NOTE: The NC-RETS Terms of Use shall apply to any person who receives access to an NC-RETS Account or Sub-account from an Account Holder or Account Manager.



Once a User login is established, NC-RETS sends an email to the login contact specified by the Account Manager with details on the individual's login name. The Account Manager is required to communicate the password to the new User. Upon logging into NC-RETS for the first time, the new User is prompted by NC-RETS to change his or her password. The new User can then perform the functions or view the information per the permissions granted by the Account Manager. The Account Manager or NC-RETS Administrator may at any time remove or add permissions to a User by using the Account administration screens.

The NC-RETS My Event Log report tracks and displays all actions performed within the Account by login name and timestamp. Account Managers have access to the My Event Log report for their Account and Sub-accounts.

3.2 Levels of Account Access

When an Account Holder creates logins for additional Users, the Account Holder assigns to the User one of two levels of specific access rights:

3.2.1 Account Holder – Supervisor

When completing the login profile for a new User, the Account Manager can assign them "Account Holder – Supervisor" privileges. Such a new User is able to register Projects, manage Certificates, and create additional logins, if necessary. The Account Manager can also give this User a subset of these privileges if needed.

3.2.2 Account Holder – View Only

When completing the login profile for a new User, the Account Manager can assign the User "Account Holder – View Only" privileges. This provides the User with limited view rights. The Account Manager will then identify the specific Sub-accounts and Certificates that the User will be able to access and view.

3.3 Confidentiality

As stated in the Privacy Policy [www.ncrets.org] and the Terms of Use, certain Account information is held confidential. Account information is only used and released by NC-RETS in aggregate through the public reporting process.

4 **Project Registration**

Within NC-RETS and all related NC-RETS documents, the term "Project" is used to refer both to (1) a generating Project, which is a Renewable Energy Facility registered with the Commission, accepted by the NC-RETS Administrator and for which NC-RETS issues Certificates, and (2) an energy efficiency Project, which is registered with NC-RETS by an Electric Power Supplier for its energy



efficiency or demand-side management programs, or a Utility Compliance Aggregator on behalf of an Electric Power Supplier. (Note: only municipal utilities and electric membership corporations can use their demand-side management programs for Portfolio Standard compliance.) Once a Project is registered within NC-RETS, monthly production data or annual energy savings can be uploaded to NC-RETS to create Renewable Energy Certificates or Energy Efficiency Certificates. Step-by-step instructions for registering a Project can be found in <u>Appendix B</u>.

4.1 Registering a Project

To ensure that double-counting does not occur, Renewable Energy Facilities registered in NC-RETS must have 100% of their output tracked by NC-RETS (with the exception of imported Certificates). If a Renewable Energy Facility or an associated contract for its production was registered in another tracking system at one point, the NC-RETS Administrator should be notified of this during the registration process and the Account Holder should be prepared to provide documentation to prove the Renewable Energy Facility (and, if applicable, its associated contracts) have been removed from the previous tracking system.

The owner, or Responsible Party, of a Renewable Energy Facility must first establish an Account within NC-RETS as described above and then register a Project as a Renewable Energy Facility or an Energy Efficiency Project, as the case may be, before NC-RETS can certify and issue Certificates attributable to it. The Account types that can register Renewable Energy Facilities are the NC Electric Power Supplier Account and the General Account. Only the NC Electric Power Supplier Account can register energy efficiency Projects in NC-RETS.

To register a Renewable Energy Facility or an energy efficiency Project (which would include DSM programs), the owner or the Responsible Party must:

- Have an approved Account in NC-RETS;
- Have registered with the Commission and received approval from the Commission for the Renewable Energy Facility; and
- Submit a completed on-line registration form containing information related to the characteristics of the Renewable Energy Facility or energy efficiency Project. (Note: Many Electric Power Suppliers will have several energy efficiency programs – their energy savings will be uploaded into one Project.)

The NC-RETS Administrator will review the information provided and request additional information as needed before approving a Renewable Energy Facility registration request in NC-RETS.

4.2 Multi-fuel Renewable Energy Facility Project

A Multi-fuel Renewable Energy Facility Project is one that produces energy using more than one Fuel Type. A Multi-fuel Renewable Energy Facility Project can use a renewable fuel with a fossil fuel or use multiple types of renewable fuels. Such facilities must register with NC-RETS as a Multi-fuel Renewable Energy Facility Project. If the relative quantities of energy produced from each fuel cannot be measured or calculated, and verified, the facility is not eligible to register as a Multi-fuel Renewable Energy Project in NC-RETS.

Each Certificate issued for a Multi-fuel Renewable Energy Facility Project will reflect only one Fuel Type. The total number of Certificates issued for a Fuel Type in a reporting period will be proportional to the energy output from that Fuel Type for that reporting period.

Each NC-RETS Account Holder or Responsible Party that has registered a Multi-fuel Renewable Energy Facility Project must report monthly to the NC-RETS Administrator the proportion of energy output per Fuel Type, by MWh or Btu, generated by the Multi-fuel Renewable Energy Facility Project during that month, calculated according to the applicable provisions of Section 5.9.1. Though energy produced from all Fuel Types must be reported, NC-RETS will only issue Certificates for the qualified renewable energy. Certificates will not be issued until such information is provided by the Account Holder or Responsible Party.

The procedures and methodologies used by the Account Holder or Responsible Party to calculate the contribution of each Fuel Type should be retained by the Account Holder or Responsible Party according to Commission rules, and will be subject to audit by the Public Staff and the Commission.

To import Certificates from multi-fuel generators, see Section 2.8.1.

4.3 Verification of Static Data Submitted During Project Registration

Upon completion of the Renewable Energy Facility Project registration process, the NC-RETS Administrator will review attestations, Energy Information Administration reports and other data sources to verify the information provided by the Account Holder.

In the event data submitted is found to be incorrect or if there is a discrepancy between the information submitted during the on-line registration process and the materials provided to verify the information, the NC-RETS Administrator will notify the registrant that the information could not be positively verified. A process of either correcting the registration form, or withdrawing the



registration form, or providing proof that the information on the registration form is correct will ensue between the NC-RETS Administrator and the registrant until the NC-RETS Administrator is satisfied that the information provided meets NC-RETS standards for accuracy. If any issues arise, the NC-RETS Administrator will raise them with the Public Staff in case a site visit is needed to verify the legitimacy of Project registration and generation data.

4.4 Updating Static Data

After the initial Project registration in NC-RETS, Account Holders should continually notify NC-RETS of the following actions or occasions that will have the effect of changing Static Data tracked by NC-RETS:

- (e) A change in Fuel Type for a Renewable Energy Facility, and the date on which the change occurred, within fifteen (15) calendar days from when the change is implemented. (The Account Holder should also notify the Commission, referencing the docket number from its registration order.)
- (f) A change in Project ownership, and the date on which the change occurred, within fifteen (15) calendar days after the change occurs. A change in ownership must be confirmed by a letter signed by both the prior and new owners of the Project, and provided to the NC-RETS Administrator. Neither NC-RETS nor the NC-RETS Administrator will be responsible for depositing Certificates into an Account that no longer represents a Project if the incorrect deposit occurs as a result of a lack of notification by the prior and new owners of the Project. Parties should arrange for a meter-reading to occur coincident with the ownership change. This meter read will be used to determine the final REC issuance to the original owner. Subsequent production data will be used to generate RECs that will be issued to the new owner. (A facility owner must notify its QRE of any change of ownership. A new owner must also register the facility with the Commission.)
- (g) A change in a Project's eligibility for any programs or certification tracked by NC-RETS. This must be communicated by the Account Holder before any Certificates affected by the change are issued or within fifteen (15) calendar days after the change occurs, whichever is sooner.
- (h) A change to any of the "essential generating characteristics" of the Project.

4.5 Misrepresentation of Static Information:

Account Holders can be removed from NC-RETS for cause, including misrepresentation of Static Data. NC-RETS reserves the right to withhold issuing Certificates, to freeze a Sub-account or Account associated with a particular Project, or to withhold participation in NC-RETS for Projects that have willfully misrepresented Static Data. If the NC-RETS Administrator has



cause to suspend the Project's participation in NC-RETS, no Certificates will be created while the Project is under suspension. While under suspension, metering data may continue to be uploaded to the Project by the QRE but it will not contribute to Certificate creation. Upon removal of the suspension, Certificate issuance can proceed.

4.6 Terminating a Project's Participation in NC-RETS

If a Project's owner or Responsible Party wants to remove a Project from NC-RETS, they can do so by notifying the NC-RETS Administrator and specifying the following:

- (d) The date the Project should be/will be removed from NC-RETS;⁶
- (e) The name of the Project's Qualified Reporting Entity, if applicable; and
- (f) The Sub-account to which Certificates should be deposited (if the usual Account for deposit is being closed as well).

NC-RETS will issue Certificates for a Project up to the date of Project termination as instructed by the Project's owner or Responsible Party. No Certificates will be issued for adjustments that occur after the termination date. If the Account to which the Project is linked is also closed at the same time, the Project's owner or Responsible Party must also specify the Account to which any remaining Certificates that have not yet been issued should be deposited. Failure to do so will result in loss of Certificates.

4.7 Changing the Account (Owner) with which a Project is Associated

If the Project's owner or Responsible Party wants to change the Account with which a Project is associated, they can do so by notifying the NC-RETS Administrator and providing the information requested by the NC-RETS Administrator, including, but not limited to:

- (d) The new Account number with which the Project will be associated;
- (e) The date the change will be effective; and
- (f) Any documentation required for legal purposes or to meet certification requirements.

Certificates from the Project that were created up to the day the Account change takes effect will remain in, or be deposited into, the Account that the Project was associated with at the time the generation occurred. For example, if a Project's owner changes the Account with which the Project is associated from Account A to Account B, and the change is effective on March 1,

⁶ This is the same as the final date of generation for which Certificates are to be issued.

then the Certificates relating to generation that issued prior to March 1 will be deposited into Account A. Any issuance from the Project after March 1 will go into Account B.

The NC-RETS Administrator will need written confirmation of this change from both parties involved in the Project transfer in order to implement the change. When changing the Account with which a Project is associated, there cannot be any time when the Project is not associated with an Account. If there is such a lapse, this will be treated as a deregistration/re-registration of the Project instead of a change of Account. (Note: Project owners also need to inform the Commission of a change in ownership, referencing the docket number that the Commission assigned to their registration order.)

5 Dynamic Data in NC-RETS – Generation Data – Role of Qualified Reporting Entity

5.1 Qualified Reporting Entity (QRE) Guidelines

A QRE is a Balancing Authority, an Electric Power Supplier, or a federal or municipal power agency. They provide production data to NC-RETS for Renewable Energy Facilities at least monthly. A Balancing Authority provides data consistent with its monthly settlements process. Other QREs provide data from routine meter readings. Each QRE adheres to the following guidelines:

- 1. A QRE that must also comply with the Portfolio Standard shall demonstrate that its employees who are responsible for reporting facility production data are separated organizationally from its employees who are responsible for Portfolio Standard compliance. "Separate from" means that the QRE employee(s) work in a separate department, division, section or unit that is not responsible for planning for, demonstrating or assuring Portfolio Standard compliance. The NC-RETS Administrator may make exceptions for extremely small Electric Power Suppliers after consulting with the Commission. However, in no event shall the employee who uses NC-RETS for compliance purposes.
- 2. A QRE creates a QRE Account in NC-RETS. The NC-RETS Administrator will validate the application information that it submits.
- 3. Upon approval, each QRE is added to the list of QREs available for selection by a Project. Upon registration, a Project will have to provide a unique ID that is assigned by the QRE, which links its facility to the QRE. NC-RETS will provide each QRE with a list of the Projects that have selected it. When a new Project selects the QRE, the QRE will be notified via e-mail.



- 4. A QRE will at least monthly provide electricity production data to NC-RETS that is inherently reliable and auditable. If the meter-read period spans parts of two months, the QRE shall assign the usage to the later month.
- 5. Reported electricity production data shall be financial settlement quality data from revenue quality meters, which would include those that meet ANSI-12 standards.
- 6. Each QRE shall upload data to NC-RETS. The QRE must use a valid active NC-RETS login and password associated with its NC-RETS QRE Account. After logging into the Account, the QRE Account Holder should locate the Meter Data Loading module. To locate the desired generation output file, the User selects the Meter Data Loading module's "browse" button to display a pop-up screen where the User can locate the desired file on computer or network drives. After selecting a file, the User selects the "Year" and then the "Upload Now" button to upload the file. The file must be formatted in ASCII Text with data fields delimited by commas (Comma-Separated Value (CSV) format).

The following example shows a conforming input file.

PROJECTID, REPORTINGENTITYID, VINTAGE, FROMDATE, TODATE, TOTALMWH 114,2A58A68,08/2010,08/01/2010,08/31/2010,100

Field Name	Data Type	Description
PROJECTID	Integer	Unique NC-RETS
		identifier for the Project
		assigned by NC-RETS
		upon Project approval.
REPORTINGENTITYID	Integer and	Unique identifier for the
	Character(50)	Project assigned by its
		QRE from the QRE's
		internal systems.
VINTAGE	Numeric	Month and year of
	Character(7)	production, formatted as
		MM/YYYY for any month
		in the current reporting
		period

The fields are as described in the following table:



FROMDATE	Numeric Character(10)	Begin month-day-year of production output period formatted as MM/DD/YYYY
TODATE	Numeric Character(10)	End month-day-year of production output period formatted as MM/DD/YYYY
TOTALMWH	Floating decimal	Total MWhs for reporting period, with three spaces beyond the decimal

A current period output file can be loaded as many times as needed adhering to the following restrictions. (1) After an Account Holder has explicitly accepted the posted output data, NC-RETS will not accept re-loaded data for the same production period. NC-RETS will reject an attempted re-loaded. If the Account Holder has not yet accepted, the QRE can re-load the data, the previous data will be over-written and the Account Holder will receive notification of new data being posted. Otherwise, the QRE should contact the NC-RETS Administrator, who can re-load the file if it is appropriate to do so. (2) If NC-RETS has accepted the data or the Account Holder has disputed the data, and no Certificates have yet issued, a QRE can re-load the data. In all other instances, the QRE should work with the NC-RETS Administrator if it believes data needs to be re-loaded.

NC-RETS will validate a Project's uploaded data before posting the output into the NC-RETS data base. When all validations⁷ are successfully completed, the data is loaded into the database and can be seen in a Project's Generation Activity Log. If the Project fails to produce energy in a given month, a QRE should report by uploading "zero" to be accepted by the Account Holder. NC-RETS then notifies the Account Holder via email that generation output has been loaded for the Project, and the data is available to be reviewed for approval or dispute.

5.2 Generation Data Requirements

NC-RETS will not create Certificates for generation supplying Station Service. Data used to issue Certificates for Renewable Energy Facilities must be derived from a Qualifying Meter or Qualifying Estimate and communicated to the NC-RETS Administrator.

⁷ Validations include correct assignment of QRE, assessment of engineering feasibility of output, potential overlap of reporting period with prior uploads, data exceeds 35 days reported for a given vintage, and whether data for a previous period remains subject to dispute.



For Renewable Energy Facilities whose output is settled monthly by a Balancing Authority, a "Revenue-Quality Meter" is the data source used by the Balancing Authority for settlements. The data must be electronically collected by a meter data acquisition system, such as an MV-90 system, or pulse accumulator readings collected by the Balancing Authority's energy management system, and verified through a Balancing Authority checkout/energy accounting or settlements process that occurs monthly. The preferred source for the data is a meter data acquisition system. If the Balancing Authority does not have an electronic source for collecting revenue meter data, then manual meter reads will be accepted.

When a QRE submits generation data (either manually entered or uploaded via file) NC-RETS validates the data to verify its engineering feasibility. To perform the validation, NC-RETS uses the following required variables from the Generating Project Registration screen:

- Nameplate Capacity
- Capacity Factor or Maximum Annual Energy

Data validation is performed for both current period reporting and Prior-Period Adjustment reporting, regardless of whether the data is loaded as a file or enteredmanually in the Project's Self-Reporting Interface. To determine the feasibility of the submitted data, NC-RETS will use the following equations:

For those Projects with a registered "Capacity Factor": (Nameplate Capacity) * (Capacity Factor) * (number of hours in the duration) * (1.02)

For those Projects with a registered "Maximum Annual Energy": (maximum annual energy)/(8760 hours in a year)] * (number of hours in the duration) * (1.02)

The number of hours in the duration is based on the duration of the generating period each time the information is reported on the Project. To determine the duration value, NC-RETS will calculate the number of hours in the generating period (for example, the number of hours in the generating period with a Begin Date of January 1, 2006 and an End Date of January 31, 2006 would be 744). The 1.02 will allow for a margin of error.

If the validation is successful, and the reported energy production is less than or equal to the maximum feasible generation for the facility, the data becomes available to the Account Holder to review and then accept, or dispute. If the Account Holder accepts the data, it will be included in the next Certificate issuance cycle. For Prior-Period Adjustments, the data will contribute to the next Certificate issuance after it was accepted (either by the Account Holder, or auto-accepted by NC-RETS).



If the loaded data fails the engineering feasibility validation, the QRE will be prompted with a "soft" warning as to the failed validation. The QRE has the ability to continue posting the data by selecting the "continue" button on this pop-up screen. If the QRE wishes to continue posting data, NC-RETS will send an automated email to both the NC-RETS Administrator and the Account Holder that the data loaded for their Project has failed the engineering feasibility validation, but that the QRE has decided to have the data posted to the database anyway. The notification will also state that the data has a status of "NC-RETS Pending" until either corrected, or approved by the NC-RETS Administrator. Data with this status will not contribute to Certificate creation. The QRE can instead decide to not post the data to the database as a result of the failed validation by selecting the "cancel" button on this same pop-up screen. Selecting cancel will discontinue the data loading process for the Project in question and no notifications will be sent.

For all loaded data, the NC-RETS Administrator will have a report "Engineering Feasibility Estimate Calculations Report" which will list all Projects that have had data loaded, the amount of output loaded, and the feasibility pass/fail result.

NOTE: Failed validation for a single facility does not result in a failure to load the entire file – only the data for the facility that failed the validation.

5.3 Measurement of Generation and Adjustments

The output from each Renewable Energy Facility Project registered in NC-RETS will be measured at the point of interconnection to the transmission or distribution company's facility. Losses occurring on the bulk transmission or distribution systems after the metering point are not reflected in the Certificates created. NC-RETS will not create Certificates for that portion of the generation that is used to supply Station Service, and therefore, generation data should also be netted of Station Service supplied from the generator's side of the point of interconnection. For Renewable Energy Facilities also serving onsite loads, NC-RETS will create Certificates for the on-site load distinct from Station Service, if the facility's owner or Responsible Party can provide evidence that the metering used is capable of distinguishing between on-site load and Station Service. If adjustments are needed, due to metering, reporting, error or any other reason, the QRE must report the adjustment as soon as possible to the NC-RETS Administrator. If Certificates have not vet been created for the original generation amount to which the adjustment applies, the Certificate or debit will be posted to the Generation Activity Log, and will be reflected in the number of Certificates created. If Certificates have been created, the adjustment will be treated as a Prior Period Adjustment described below in Section 5.4.

5.4 **Prior Period Adjustments**

Adjustments can be requested by an Account Holder, including Self-Reporting Facilities, or a QRE, after the data is reported and used to issue Certificates in NC-RETS. These adjustments are known as Prior Period Adjustments. The Account Holder accesses the Project Output Data Review screen to submit an adjustment to the NC-RETS Administrator. If accepted by the NC-RETS Administrator, the Certificate or debit to the generation volume reported in the current month will post to the Generation Activity Log. Consequently, the adjustment will be realized when Certificates are next issued. If new Certificates are created, the vintage of the Certificates shall reflect the actual generation period. NC-RETS will not accept adjustments for generation reported more than one year prior.

5.5 Notification of Adjustments

The Account Holder will be informed of all positive or negative adjustments once the adjustment has been posted to the Generation Activity Log. Once NC-RETS informs the Account Holder of a need for adjustment, the Account Holder then has fourteen (14) calendar days to dispute or accept the adjustment. If after fourteen (14) days the Account Holder has failed to respond, the NC-RETS Administrator will automatically accept and create the adjustment.

5.6 Data Collection Procedure

Energy-generation data should be reported within 30 days of the meter read and will be accepted by the NC-RETS Administrator on an ongoing basis. Currently, NC-RETS can accommodate data in batches that contain up to 35 days of production data. Data files are to be electronically transmitted to NC-RETS using a secured protocol and a standard format specified by the NC-RETS Administrator. The data shall reflect, at a minimum, the month and year of the generation, monthly accumulated MWhs for each NC-RETS Project ID and the associated NC-RETS and Project ID(s) for each Project. The owner of the Generating Project, as the owner of the metered data, or the Responsible Party, has the responsibility to direct the QRE to release generation data to NC-RETS.

The data must be transmitted by a single entity, which must be either (1) a QRE Self-Reporting Facility.

5.7 Special Requirements for Self-Reporting Facilities Only

A Self-Reporting Facility must enter actual cumulative meter readings measured in kWh / MWh or Btu (which will be converted to MWh) and the date of the meter reading via the Self-Reporting Interface. Actual cumulative meter readings must be entered no less frequently than annually. If a Self-Reporting Generator chooses to report data in cumulative over the course of multiple months (for example, 01/2010-06/2010), it can do so by



uploading the data for the most recent vintage month (06/2010) and providing evidence of the monthly breakdown quantity to the NC-RETS Administrator. Self-Reporting Facilities that do not enter meter readings via the Self-Reporting Interface as required will receive a reminder notice by email from the NC-RETS Administrator. Self-Reporting Facilities risk having their Project de-activated in NC-RETS if they do not provide meter readings at least annually.

5.8 Generation Activity Log

Each Project registered in NC-RETS will have a Generation Activity Log associated with it. The Generation Activity Log is an electronic ledger where generation is posted prior to Certificate creation. Each time generation data is received by NC-RETS for a particular Project, the date and quantity of MWh is posted to the Generation Activity Log. Similarly, adjustments received will be posted likewise. The status of each entry in the Generation Activity Log will be noted, where the possible values are:

• **NC-RETS Accepted:** This label is used for all generation that has been reported to NC-RETS, has passed the NC-RETS feasibility test and has been logged to the Generation Activity Log, but has not yet been accepted (or disputed) by the Account Holder.

• **NC-RETS Pending:** The NC-RETS Administrator is waiting for the resolution of a situation before the Certificates can be issued. For example, if the NC-RETS Administrator is waiting to receive a Fuel Type allocation from a Multi-fuel Generation Project or other update from a Generating Unit.

• **Account Holder Accepted:** The Account Holder has accepted the posted generation, but the Certificates have not yet been issued.

• **NC-RETS Admin Accepted:** The NC-RETS Administrator has accepted the posted generation, but the Certificates have not yet been issued.

• **Account Holder Disputed:** The Account Holder has disputed the posted amount of generation.

• **NC-RETS Admin Disputed:** The NC-RETS Administrator has disputed the posted amount of generation.

• **Certificates Created:** Certificates have been created.

The status of each entry in the Generation Activity Log will be changed consistent with the information received by the NC-RETS Administrator. Certificates will be issued based on the total whole number of MWh on the Generation Activity Log that are marked "Account Holder Accepted." Only Certificates that are marked as such will contribute to Certificate creation. Any fractional MWh will be rolled forward until sufficient generation is accumulated for the creation of a Certificate. Each time an item is posted to



the Generation Activity Log, the Account Holder will be notified electronically. Account Holders will have fourteen (14) calendar days to accept or dispute any new regular entries to the Generation Activity Log and fourteen (14) days to accept or dispute adjustments. If the Account Holder does not respond, the posting will be automatically accepted after the specified period and Certificates issued.

The Generation Activity Log will include, at minimum, the following entries:

- (k) Account Holder's Name
- (I) Activity Date
- (m)NC-RETS Project ID for associated data posted
- (n) Activity Description identifying Data Submitted, Fractional Data Remaining, Certificates Created, etc.
- (o) Reporting Period Start
- (p) Reporting Period End
- (q) MWh of generation reported to NC-RETS during the current month
- (r) Fuel Type
- (s) Status
- (t) Note (displaying Serial Numbers or data upload file names)

5.9 Multi-fuel Generation Projects

For Multi-fuel Generation Projects, Certificates will be created for the eligible Fuel Type(s) only.⁸ Each Certificate issued for a Multi-fuel Generation Project will reflect only one fuel source, with the total number of Certificates issued for a Fuel Type being proportional to the overall output for that reporting period.

After each upload of production data, the Project's Account Holder will be asked to first verify the energy production data, and then input how much of the production is attributable to each Fuel Type. The Account Holder for the facility shall retain for audit supporting documentation related to the derivation of the proportion of electric output per Fuel Type for each period for which the Generating Unit is issued Certificates. Such supporting documentation is subject to audit by state regulators (including the Commission) and the Project's QRE.

⁸ For example, a coal-fired Generating Unit that uses biomass for co-firing can be considered a Multi-fuel Generation Project and have biomass Certificates issued in respect of that biomass-fired generation.

NC-RETS

For purposes of creating Certificates reflecting the fuel source mix of Multi-fuel Generation Projects, the proportion of Certificates attributable to each Fuel Type shall be determined consistent with the following rules:

For biomass co-fired with fossil fuels or using fossil fuels for startup or supplemental firing: In each month, the Certificates for each Fuel Type in such Multi-fuel Generation Project will be created in proportion to the ratio of the net heat content of each fuel consumed to the net heat content of all fuel consumed in that month, adjusted to reflect differential heat rates for different fuels, if applicable.

5.10 Energy Efficiency Data Requirements

An Electric Power Supplier that is eligible to demonstrate Portfolio Compliance via Energy Efficiency Certificates, or its Utility Compliance Aggregator, shall create a Project in NC-RETS for that purpose. The Electric Power Supplier (or its Utility Compliance Aggregator) shall use the Self-Reporting Interface to create EECs. The Electric Power Supplier or its Utility Compliance Aggregator shall retain for audit work papers demonstrating how it calculated the amount of EECs to be created. Such work papers shall detail for each customer program the estimated volume of customer participation and related energy savings, adjustments for actual operating results (participation and savings rates) and the findings of measurement and verification analyses.

6 Creation of Certificates

Certificates are issued in whole numbers only. Once a Certificate is created, no changes can be made to that Certificate.

6.1 Certificate Creation

The NC-RETS Administrator will issue one Certificate for each MWh of eligible electric energy or 3,412,000 Btu of eligible thermal energy that is generated or electric energy saved by a Project. Certificates are issued based on the number of whole MWh listed in the Generation Activity Log for a given reporting period. Each Certificate shall have a unique Serial Number. Certificate Serial Numbers shall contain codes embedded in the number. The table below identifies the Serial Number format used in NC-RETS.



Identifier	Display Order	Data Type	Length	Range of Codes	Comments
Originating Registry	1	Alpha-numeric	3	NCRETS (WREGIS, ERCOT, GATS, MRETS, MIRECS, NEPOOL & NAR (for Certificate imports)	Used to identify originating registry (especially important for enabling import-exports with other registries)
Unit type	2	Alpha-numeric	4	REC: Renewable Energy Certificate issued for a Renewable Energy Facility or SEPA allocation EEC: Energy Efficiency Certificate issued for an energy efficiency project	Used to identify if the issuance is based on renewable energy generation, energy efficiency project
NC-RETS ID	3	Numeric	6	1 - 999999	NC-RETS Unique ID assigned to each Facility
State	4	Alpha-numeric	2		State Abbreviation identifying the State in which the renewable energy generation occurred. SEPA would be NA. EE or DSM would be NC
Vintage Month	5	Numeric	2	01-12	The month in which the renewable energy and SEPA generation occurred. Not needed for EE and DSM
Vintage Year	6	Numeric	4	2008-2099	The year in which the energy efficiency or renewable energy generation occurred.
Batch Number	7	Numeric	5	Numeric value assigned to the each batch of certificates created 1 - 99,999 unique per source per vintage.	
Serial Block Start	8	Numeric	9	Numeric values assigned by NC-RETS from 1 - 999,999,999.	A number to identify the first certificate in a block of certificates.
Serial Block End	9	Numeric	9	Numeric values assigned by NC-RETS from 1 - 999,999,999.	A number to identify the last certificate in a block of certificates.

TABLE 2: NC-RETS SERIAL NUMBER IDENTIFIERS

6.2 **Process and Timeline for Certificate Creation**

Certificates will not be issued for generation occurring prior to January 1, 2008, and RECs issued in other registries before January 1, 2008, may not be imported into NC-RETS.



Once the generation data (production data as measured by a Qualifying Meter or a Qualifying Estimate) is received by the NC-RETS Administrator and a data validity check is performed, it will post in the Account Holder's "Generation Activity Log" and NC-RETS will notify the Account Holder via email that generation has been posted. The generation posting will be marked "NC-RETS Accepted" on the Generation Activity Log. Once the generation is accepted by the Account Holder, the generation posting will be marked "Account Holder Accepted." The Certificates will issue immediately following this. If the Account Holder takes no action, Certificates will issue in 14 days.

The Account Holder must notify the NC-RETS Administrator if it believes the generation data amount recorded on the Generation Activity Log is inaccurate for any reason. The Account Holder may register a dispute any time after the generation is posted and will have 14 calendar days to do so. While the generation posting dispute is being resolved, the generation posting will be marked "Account Holder Disputed." If the Account Holder does not register a dispute with the NC-RETS Administrator, the Certificates will be created in 14 days.

For Multi-fuel Generation Projects, RECs will not issue until the Account Holder both accepts the generation data and supplies supporting fuel allocation data, as specified in Section 5.9. The Account Holder must submit to NC-RETS the proportion of energy output to be allocated to each Fuel Type. The Account Holder provides the Fuel Type allocation via the Generation Data Review screen located in the Account Holder's Asset Management Module. The fuel allocation information will remain available in NC-RETS for audit purposes. Account Holders must retain for audit the work papers demonstrating how they determined the fuel allocation for each reporting period.

6.3 Certificate Creation for Accumulated Generation

Generation data from Renewable Energy Facilities that have a Nameplate Capacity of 10 kW or less that self-report their output need not be reported monthly and may be accumulated over several months prior to submittal to NC-RETS for Certificate issuance. However, NC-RETS will require the owner to self-report the data in time-increments that do not exceed 35 days. The vintage on the issued Certificate(s) will be the last month and year of generation contributing to one (1) accumulated MWh.

6.4 Data Fields Carried on Each Certificate

Each Certificate carries a list of data fields. Some of these fields may not be applicable for energy efficiency projects.



TABLE 3: CERTIFICATE DATA FIELDS

DATA FIELD	Comments	
CERTIFICATE DATA:		
Certificate Type	REC or EEC	
NC-RETS ID	Unique ID assigned to each Project record in NC-RETS.	
Project Type	Used to identify if the issuance is based on a Renewable Energy Facility (including SEPA), or Energy Efficiency Project (including demand side management)	
Project Name	Name of Project	
Certificate Vintage	Vintage of Generation (month/year for RECs; Year for EEC, including DSM)	
Certificate Serial Numbers	See details above	
Quantity of Certificates	Total Certificates	
Meter Data From:	Year-Month-Date	
Meter Data To:	Year-Month-Date	
Certificate Creation Date:	Date Certificates were issued in NC-RETS	
Cost-Recovery Year:	Year of Cost-Recovery	
NC REPS Expiration:	Expiration of NC REPS Eligibility	
Utility behind project [EEC only]	Name of Electric Power Supplier running the EE/DSM program(s)	
STATIC ASSET DATA:		
State or Province	State or Province facility is located in	
Country	Country facility is located in	
NERC Region	NERC Region facility is located in	
eGrid Sub-Region	eGRID Sub-Region facility is located in	
Commenced Operation Date	Date the Facility commenced operation	
Fuel Type	Fuel Type abbreviation	
Nameplate Capacity	Nameplate Capacity of Facility	
Reporting Entity Type	QRE or Self-reporting	
Reporting Entity Contact Company or Organization name	Name of QRE, if applicable	
Utility to which Facility is interconnected	Utility Interconnect	
Hydro Upgrade (Y/N)	Denotes whether Facility has been Upgraded	
Upgrade Amount: NA	Denotes the portion, if applicable, of facility that has been upgraded and is eligible to create RECs for upgrade amt.	
Re-power date (required if Re-powered Indicator = Y)	Date of re-powering	
NC In-State/Out-of-State	Facilities eligible for NC and located in NC; Facilities eligible for NC and located outside of NC but with power delivered to any NC utility. If these certificates are transferred out of the utility account, they lose the NC In-State and become Out-of-State; Facilities eligible for NC and located outside of NC	



ELIGIBILITY FOR VOLUNTARY PROGRAMS:	
Green-e Energy Eligible ⁹	Denotes eligibility and, if applicable, certification number
LIHI Certified ¹⁰	Denotes eligibility and, if applicable, certification number

7 Certificate Errors and Correction

7.1 Generation Data Validity Check

All generation data received by NC-RETS will undergo an automatic data validity check to ensure that erroneous and technically infeasible data is not entered into NC-RETS and used to issue Certificates. The data validity check will compare reported energy production to an engineering estimate of maximum potential production, calculated as a function of technology type, associated maximum capacity factor, Nameplate Capacity, Fuel Type and time period since the previous cumulative meter reading was entered. If data entered exceeds an estimate of technically feasible generation, the NC-RETS Administrator will be notified and the generation will be posted to the Generation Activity Log noting the status of failed feasibility. The NC-RETS Administrator will contact the Account Holder if the generation data entered is infeasible.

7.2 Certificate Errors Discovered After Certificate Issuance

Once a Certificate is created, no changes can be made to that Certificate. In the event that an error is discovered after Certificates have been issued, the NC-RETS Administrator will contact the Commission to explain the issue. The NC-RETS Administrator and the Commission will determine appropriate action, which could include Retiring Certificates that were created erroneously. (Certificate issuance errors caused by errors made in calculating the relative fuel mix for Multi-fuel Generation Projects will be handled in this manner.) The NC-RETS Administrator may "freeze" Certificates that are implicated in an issuance error until a method of addressing the error is developed. This means that the Certificates cannot be transferred to another Account Holder or Retired until the error is resolved. Certificate issuance errors and their resolution will be logged, and that log made available to the Public Staff and the Commission for audit.

⁹ This field is targeted for users who will use NC-RETS for voluntary program certifications.

¹⁰ This field is targeted for users who will use NC-RETS for voluntary program certifications.

8 NC-RETS Compliance Requirements

Electric Power Suppliers and Utility Compliance Aggregators will make transfers to the Compliance Sub-account to mirror and support their annual Portfolio Standard compliance filing to the Commission. Certificates in this Sub-account will remain in Active status until the Compliance Sub-account has been reviewed and approved by the Commission. Once approved, the Certificates will be Retired. The Public Staff and the Commission will have access to the Sub-account details.

The process will work as follows:

1) Electric Power Suppliers will establish a Compliance Sub-account for a compliance year using the "Create New Sub-Account" link. Reference Section 2.6 for more details about how Compliance Sub-accounts function. The Electric Power Supplier or Utility Compliance Aggregator will select the relevant compliance compliance type (electric public year and utility or municipality/electric membership corporation) to determine the mandates they have to meet via the given Compliance Sub-account. Utility Compliance Aggregators will need to specify the specific Electric Power Suppliers for which they are reporting, along with the prior year retail sales for each of those Electric Power Suppliers. Utility Compliance Aggregators have the option to create a Compliance Sub-account for each municipality or electric membership corporation separately if they so choose. Or, several Electric Power Suppliers (municipality/electric membership corporations only) can be grouped together for purposes of a Compliance Sub-account.

2) Electric Power Suppliers or Utility Compliance Aggregators can then proceed to transfer Certificates to the Compliance Sub-account(s).

3) From a Compliance Sub-account the Account Holder can access a Compliance Report that displays the quantity achieved and quantity still needed for specific mandates such as solar power, swine waste, and poultry waste, as well as the overall Portfolio Standard mandate, using the mandate requirement reflected in the statute for electric public utilities or municipal utilities/electric membership corporations. The report will also display the proportion of the Certificates that are in-state (including out-of-state RECs bundled with power delivered to NC) and how many are unbundled out-of-state Certificates.

4) When the Account Holder has finished their transfers for the compliance year, they will 'submit' the Compliance Sub-account for Commission review. This will lock the Certificates in place allowing for the Public Staff and Commission to perform their reviews. No changes to this Sub-account can be made by the Account Holder during this time.

5) The Commission will receive an automatic notification that a report has been submitted for their review. After their review the Commission can select to either 'approve' or 'reject' the Compliance Sub-account. Approval will result in the Certificates being Retired permanently in the Compliance Sub-account associated with the given compliance year. Rejection will reopen the Compliance Sub-account with the required Certificates after which they can re-submit the Sub-account for Commission review. Status of the Compliance Sub-account can be accessed via the Compliance Reports available to the Account Holder, the Public Staff and the Commission.

9 Public Reports

Public reports will be accessible to anybody via the public page on the NC-RETS website. It is expected that additional public reports will be added to meet future needs of Account Holders and Program Administrators using NC-RETS. Public reports are carefully designed to ensure the confidentiality of Account Holder data per the Terms of Use. See the Terms of Use for more information regarding confidentiality.

- Account Holders. This report contains a listing of all Account Holders with some limited contact information.
- **NC-RETS Projects.** This report contains a list of current and historic facilities by fuel source with owner information, updated daily as needed. It includes a link to each Project's docket within the Commission's website.
- **RECs Issued- Annual Report.** This report will have a drop-down list beginning with 2008. Data for 2010 RECs Issued will not be posted until April 1st 2011. The same will be true with all following years where the data for the previous year is not posted until April 1st. Data to be shown will be an aggregate of RECs issued by fuel type and eligibility.
- **EECs Issued- Annual Report.** This report will have a drop-down list beginning with 2008. Data for 2010 EECs Issued will not be posted until April 1st 2011. The same will be true with all following years where the data for the previous year is not posted until April 1st. Data to be shown will be an aggregate of EECs issued per utility that performed the energy savings.
- **Public Utility Compliance Report.** Provides details of each utility's Portfolio Standard compliance filed per year.
- **Imported Facilities Report.** Shows all Renewable Energy Facilities which exported Certificates into NC-RETS.



• **Bulletin Board.** Shows RECs which are posted by Account Holders as being available for purchase.

9.1 Account Holder Reports

Account Holder reports for a specific Account will only be accessible to the Account Holder, their designated agents and the NC-RETS Administrator. Account Holders, including all of the Users for an Account, can view up-to-date data in these reports at any time. Current reports include:

- **My Event Log.** This report lists all of the events that have taken place in the Account.
- **My Sub-Accounts.** This provides a list of Certificates held in the Account's Sub-accounts and allows the Account Holder to filter data by specific Active or Retirement Sub-accounts.
- **My Certificate Transfers.** This report provides a comprehensive list of Certificate transfers between Sub-accounts and other Account Holders in NC-RETS.
- **My Recurring Transfers.** This includes transfer details related to Forward Transfers only.
- **My Account Holder Registration History.** This report provides a list of all the changes to the Account Holder registration data.
- **My Project Registration History.** This report provides a list of all the Projects that have been registered in NC-RETS and includes the date of registration, the NC-RETS ID and a link to the Project registration screens.
- **My Generation Activity Log.** This report provides a log of all generation and energy efficiency data loaded into NC-RETS for all of an Account Holder's Projects. It includes both self-reported data and each file uploaded by a QRE.
- **My Generation Report.** This report shows a summary of the data loaded by vintage for each facility.
- **My Compliance Report.** This report provides North Carolina Electric Power Suppliers and Utility Compliance Aggregators the ability to view their Certificates transferred into their Compliance Sub-accounts with built-in calculations to determine if the compliance obligations are being met or not.



- Non-NC REPS Retirement Report. This report captures all voluntary retirement for any Account Holder retiring RECs for reasons other than the Portfolio Standard requirement.
- **Cost Recovery Report.** The Cost Recovery Report is only available to NC Electric Power Supplier Accounts. This report lists all Certificates held in the Account with a checkbox for the Account Holder to select all batches of Certificates to be reported for a cost recovery year.
- **My Invoices.** This report lists all NC-RETS invoices that have been issued to the Account Holder including the amount and payment status. The report also includes payment information.

10 Data Security

The following are a minimum set of security practice requirements for NC-RETS to ensure data integrity and confidentiality:

- (a) Secured web portal interface with password protection for Static Data collection, User access and reporting.
- (b) Restricted access privileges based on participant and User roles using digital certificates.
- (c) Well-defined system backup and recovery processes.
- (d) Secured file transfer and data upload processes using encrypted communications for all data interfaces

[THE REMAINDER OF THIS PAGE IS LEFT BLANK]



Appendix A: Account Holder Registration Process

The following information will guide you through the steps necessary to create an NC-RETS Account. The NC-RETS Administrator is available to assist you throughout the registration process. Please call (888-378-4461) or email <u>NCRETS@apxenv.com</u>.

STEP 1 – REVIEW NC-RETS OPERATING DOCUMENTS

You should first review the NC-RETS Operating Documents including the Terms of Use, Fee Schedule and Operating Procedures. The documents are on the Documents page (under the Resources tab) on the NC-RETS website (www.NCRETS.org).

STEP 2 – ONLINE REGISTRATION

Go to <u>www.ncrets.org</u> and select the "Register for an Account" link. A pop-up window will appear with a checklist describing the steps required to register for an Account. Select the appropriate Account Type and click the "Continue Registration" button.

The available Account Types are:

- North Carolina Electric Power Supplier¹¹
- General Account
- Qualified Reporting Entity
- Program Auditor

STEP 3 – ACCEPT THE TERMS OF USE

Read and agree to the NC-RETS Terms of Use (this is your next step after clicking "Continue Registration"). Acceptance of the Terms of Use must be indicated by reviewing all terms; checking each section; and lastly, agreeing to the Terms of Use by pressing the "I Agree" button.

STEP 4 – COMPLETE ACCOUNT APPLICATION

Upon accepting the Terms of Use, the next screen shows the online New Account Application Form. You will need to complete all required fields that are noted by an asterisk (*). You must designate at least one person, but may designate two, who would receive emails regarding the status of NC-RETS invoices and payments. Note: It will be possible for the public to view the

¹¹ See Page 3 for instructions regarding inputting prior year sales data.



Organization Contact information you provide when your Account is approved by the NC-RETS Administrator.

Upon completing the New Account Application Form and clicking "Submit," you will receive an email notification to validate/activate your registration. This activation must occur before the NC-RETS Administrator is notified of your pending Account.

STEP 5 – ACCOUNT REVIEW

The NC-RETS Administrator will review the Account application. If the Account application is complete and approved, an email notification of Account approval will be sent to the designated Account Manager email address provided in the New Account Application Form. If materials are incomplete or additional information is required, the NC-RETS Administrator will notify the Account Manager. Approved Account Holders may begin using all functions of NC-RETS available to their type of Account.

STEP 6 – CREATE SUB-ACCOUNT(S) & ADDITIONAL LOGINS

Upon Account approval, default Sub-accounts are automatically created based on the privileges of your Account type. All NC Electric Service Provider Accounts, and General Accounts will receive one Active, Export and Retirement Sub-account. Additional Sub-accounts can be created and Logins added to an Account.



Appendix B: Project Registration Process

The following information will guide you through the steps necessary to register a Project in your NC-RETS General or North Carolina Electric Power Supplier Account. The NC-RETS Administrator is available to assist you throughout the registration process. Please call 888-378-4461 or email <u>NCRETS@apxenv.com</u>.

STEP 1 – Review NC-RETS Operating Procedures

The NC-RETS operative documents detail the requirements and definitions of different types of Projects. The documents are available on:

www.ncrets.org/resources/documents.

STEP 2 - Register Project

- a. Log in to your Account and from the Manage Projects module, select the "Register New Project" link.
- b. Fill out the information on the New Project Registration page and select "Next."
- c. Continue to fill out the information on the second and third page of the New Project Registration screen and press "Submit."
- d. The NC-RETS Administrator will then be notified of the New Project Registration.
- e. At any time during this process you can save the form and return to complete it at a later time if you do not have all the required information.

Note: Owners of thermal projects will be required to enter their facility's maximum capacity in MW or annual energy production in MWh. To ease the process of registering a new thermal project, owners might want to calculate these conversions prior to starting the registration process.

STEP 3 - Project Review

The NC-RETS Administrator will review the New Project Registration. For an energy project, the NC-RETS Administrator will compare the registration information to the Commission's order approving the Project as a Renewable Energy Facility. For an energy efficiency project, the NC-RETS Administrator will contact Commission Staff to verify that the electric power supplier is creating a project that is consistent with its REPS compliance plan filed with the Commission. Discrepancies regarding ownership and Project fuel(s) and size will need to be resolved before the Administrator will approve the Registration. If the New Project Registration is complete and approved, an email notification describing account approval is sent to the Account Holder. If materials are

incomplete or additional information is required, the Administrator will notify the Account Manager.

STEP 4 – Certificate Issuance

Certificates can be issued whenever metering data is available and has been communicated to NC-RETS. Metering data must come from a QRE (unless the Project is a Self-Reporting Facility). The Account Holder will receive an email indicating that metering data is available for their review. The Account Holder has 14 days in which to dispute the metering data. If the Account Holder takes no action, Certificates will issue in 14 days. In addition, the Account Holder can immediately approve the data, and Certificates will issue within one day.

All energy efficiency projects (including demand side management for municipalities and electric membership corporations) are self-reporting and can submit the energy savings data once per year to issue Energy Efficiency Certificates. Such Electric Power Suppliers must retain for audit their work papers demonstrating their forecasted energy savings for each program that they operate, and the actual results of those programs, including data from measurement and verification reports filed with the Commission. A group of energy efficiency programs may be treated by an Electric Power Supplier or Utility Compliance Aggregator as one Project within NC-RETS, provided that the Electric Power Supplier or Utility Compliance Aggregator maintains thorough documentation explaining how the net savings (and resulting Energy Efficiency Certificates) were calculated.

Unless otherwise provided, each municipal utility or electric membership corporation (or their Utility Compliance Aggregator) that wants NC-RETS to issue Certificates for their Southeastern Power Administration (SEPA) allocations will need to create a Project in NC-RETS and self-report their monthly SEPA deliveries based on their invoice from SEPA.

STEP 5 – Annual Update of Renewable Energy Facility Registration

Per the Commission's rules, Renewable Energy Facilities must annually provide attestations in order to continue to earn Certificates eligible for compliance with the Portfolio Standard. Each March 1st, March 20th, April 1st and April 15th NC-RETS will send an automated notification reminder to Account Holders that have Projects assigned to them. These notifications will remind the Account Holder of the need to complete the on-line attestation form. The Account Holder will be asked to certify that the Renewable Energy Facility remains in substantial compliance with laws for protecting the environment, that the facility continues to be operated as a Renewable Energy Facility, that Certificates from the facility are not being remarketed and that the Account Holder agrees to the auditing of its books by the Public Staff and the Commission. The facility owner certifies on-line regarding these four statements and provides their name, title, company and

phone number. After April 1, the Account Holder will be forced to complete the attestation in order to continue using NC-RETS. If the Account Holder has not completed the attestation by April 15, NC-RETS will notify the Commission which will consider whether to revoke the Renewable Energy Facility's registration.



Appendix C: Documentation Requirements for Multi-fuel Generation Projects

Upon registering a Multi-fuel Generation Project, the Account Holder must submit to the NC-RETS Administrator a report documenting the methodology it will use to calculate the energy production associated with each fuel used during a month. Following the NC-RETS Administrator's review and acceptance of such a report's methodology, the Account Holder may seek creation of Certificates.

Documentation of the following information used to calculate the proportion of energy output per Fuel Type generated by the Renewable Energy Facility during a billing period must be maintained by Multi-fuel Renewable Energy Facilities for 10 years or as otherwise required by Commission rule.

- 1. Quantities of each Fuel Type used must be documented and must be consistent with those reported to Balancing Authority(s), EPA or state air regulators, if applicable.
- 2. Documentation of net heat content for each Fuel Type (if applicable) must be supported by documentation.
- 3. Specification of a heat rate must be consistent with the heat rate reported to the Renewable Energy Facility's Balancing Authority, if applicable.



Appendix D: NC-RETS Generator Fuel Types

FUEL/PROJECT TYPE		Devenue
(SHORT DESCRIPTION)	FUEL/PROJECT TYPE(LONG DESCRIPTION)	RENEWABLE
BAW	Biomass - Agricultural Solid Waste	Yes
BA3	Biomass - Animal Waste - Other Animal Waste, Solid or Gas	Yes
DAS	Biomass - Animal Waste - Poultry Waste, Solid or	165
BA2	Gas	Yes
BA1	Biomass - Animal Waste - Swine Waste, Solid or Gas	Yes
BML	Biomass - Combustible Liquids - Other	Yes
	Biomass - Combustible Liquids - Spent Pulping	100
BBL	Liquors	Yes
BMC	Biomass - Energy Crop	Yes
BLF	Biomass - Landfill Methane	Yes
	Biomass - Other Biomass, including Combustible	
BMO	Residues	Yes
BIM	Biomass - Other Combustible Gas	Yes
BWW	Biomass - Wood Waste	Yes
CO1	Coal	No
DI1	Diesel	No
GE1	Geothermal	Yes
HYD	Hydropower - Non-SEPA	Yes
H2O	Hydropower - SEPA	Yes
JET	Jet Fuel	No
MSW	Municipal Solid Waste - Non-Renewable	No
NG1	Natural Gas	No
OC1	Ocean/Wave/Current	Yes
OIL	Oil	No
OTH	Other non-renewable fuel	No
SO1	Solar - Photovoltaic	Yes
STH	Solar - Thermal	Yes
STU	Solar – Thermal Unmetered	Yes
TDF	Tire Derived Fuel – Renewable	Yes
TIR	Tire Derived Fuel – Not Renewable	No
WND	Wind	Yes



Appendix E: List of Referenced Documents

NC-RETS Terms of Use NC-RETS Fee Schedule North Carolina Session Laws 2007-397 Commission Rules R8-64 through 69



Appendix F: Compatible Tracking Systems

COMPATIBLE TRACKING SYSTEM	CAN EXPORT CERTIFICATES TO NC-RETS	CAN IMPORT CERTIFICATES FROM NC-RETS	WEBSITE
North American Renewables Registry (NAR)	Yes	Yes	narenewables.apx.com
Midwest Renewable Energy Tracking System (M-RETS)	Yes	No	mrets.org
Western Renewable Energy Generation Information System (WREGIS)	Yes	No	wregis.org
Electric Reliability Council of Texas (ERCOT)	Yes. See Appendix G	No	texasrenewables.com
PJM GATS	No	No	Pjm-eis.com



APPENDIX G: PROTOCOL FOR IMPORTS FROM ERCOT

Step	Process	ERCOT Status	NC RETS
	Seller will transfer RECs from their ERCOT account to APX, Inc (for benefit of NC-RETS) account.	Pending transfer	n/a
2	 Seller will email NC-RETS admin the "Export Request Form" which includes the details below as well as agreement to release data to NC-RETS: 6) REC Quantity to be transferred 7) REC serial numbers 8) REC Vintage 9) Seller account name & ID# in ERCOT 10) Buyer account name & ID# in NC-RETS account ID 	Pending transfer	n/a
3	 APX will confirm that the details in the Export Request Form match the RECs that are pending transfer in the APX, Inc (for benefit of NC-RETS) account. APX will confirm that the facility is approved by the NCUC. APX will respond to the Seller in ERCOT that it is awaiting confirmation from the Buyer in NC-RETS or make the Seller in ERCOT aware of any issues found in 1-2 above. 		n/a
	APX will email the Export Request Form from the Seller in ERCOT to the Buyer in NC-RETS to confirm transaction details	Pending transfer	n/a
	Upon confirmation from the Buyer in NC-RETS, ERCOT REC transfer will be accepted in <i>APX, Inc (for benefit of</i> <i>NC-RETS)</i> account. and proceed to step 6 -or- Upon rejection by the buyer in NC-RETS, ERCOT REC transfer will be rejected by the <i>APX, Inc (for benefit of</i> <i>NC-RETS)</i> account. (No further steps needed)	Transfer Accepted – Certificates Active in APX-ERCOT account OR Transfer Rejected – Certificates Active in Seller's account in ERCOT	
6	NC-RETS Admin creates Project Record in NC-RETS, if necessary ¹² , and issues RECs in NC-RETS.	Certificates Active in the ERCOT APX, Inc. Account	Certificates Issued in APX's NC-RETS account
	NC-RETS Admin transfers RECs to the buyer in NC-RETS	Certificates Active	

¹² If this is the first import of RECS from the facility, an import project will need to be created in NC-RETS. The projects are created once in the NC-RETS administrator account and stay there. After being created once, they do not need to be created for each future transaction.



8	Buyer in NC-RETS accepts transfer.	Certificates Active	Transfer
			Accepted
	APX retires Certificates in ERCOT, APX, Inc (for benefit of	Certificates	Certificates
		Retired	Active in
	NC RETS [Exporter] [Importer][Date]		Buyer's
			NC-RETS
			account
		Certificates	Certificates
		Retired	Active
	NC-RETS with REC details for the ERCOT RECs that		
	were retired, paired with the NC-RETS RECs that were		
	created.		