**ERCOT Nodal Protocols**

**Section 14: State of Texas Renewable Energy Credit Trading Program**

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# State of Texas Renewable Energy Credit Trading Program

14.1 Overview

(1) On May 9, 2000, the Public Utility Commission of Texas (PUCT) appointed ERCOT as Program Administrator of the Renewable Energy Credits (REC) Trading Program described in subsection (g) of P.U.C. Subst. R. 25.173, Goal for Renewable Energy.

(2) The purposes of the REC Trading Program are:

(a) To ensure that the cumulative installed generating capacity from renewable energy technologies in this state totals 2,280 megawatts (MW) by January 1, 2007, 3,272 MW by January 1, 2009, 4,264 MW by January 1, 2011, 5,256 MW by January 1, 2013, and 5,880 MW by January 1, 2015, with a target of at least 500 MW of the total installed renewable capacity after September 1, 2005, coming from a renewable energy technology other than a source using wind energy, and that the means exist for the state to achieve a target of 10,000 MW of installed renewable capacity by January 1, 2025;

(b) To provide for a REC Trading Program by which the renewable energy requirements established by the Public Utility Regulatory Act, TEX. UTIL. CODE ANN. § 39.904(a) (Vernon 1998 & Supp. 2007) (PURA) may be achieved in the most efficient and economical manner; to encourage the development, construction, and operation of new renewable energy Resources at those sites in this state that have the greatest economic potential for capture and development of this state’s environmentally beneficial Resources; to protect and enhance the quality of the environment in Texas through increased use of renewable Resources; and

(c) To ensure that all Customers have access to providers of energy generated by renewable energy Resources pursuant to PURA § 39.101(b)(3).

(3) ERCOT shall administer the REC Trading Program, which became effective July 1, 2001. Entities participating in the REC Trading Program must register with and execute the appropriate agreements with ERCOT.

14.2 Duties of ERCOT

(1) As described in more detail in this Section, ERCOT shall:

(a) Register renewable energy generators;

(b) Register offset generators;

(c) Register Retail Entities;

(d) Register other Entities choosing to participate in the Renewable Energy Credit (REC) Trading Program;

(e) Create and maintain REC trading accounts for REC Trading Program participants;

(f) Determine the annual Renewable Portfolio Standard (RPS) requirement for each Retail Entity in Texas using the formulas set forth in this Section;

(g) On a quarterly basis, award RECs or Compliance Premiums earned by REC generators based on verified MWh production data;

(h) Verify that Retail Entities meet annual REC compliance requirements;

(i) Retire RECs or Compliance Premiums as directed by REC Trading Program participants;

(j) Retire RECs or Compliance Premiums as they expire;

(k) On a monthly basis, make public the aggregated total MWh competitive energy sales in Texas;

(l) Make public a list of REC Account Holders with contact information (e-mail, address, and telephone number) so as to facilitate REC or Compliance Premium trading;

(m) Maintain a list of offset generators and the Retail Entities to whom such a generator’s offsets were awarded by the Public Utility Commission of Texas (PUCT);

(n) Conduct a REC Trading Program Settlement process annually;

(o) File an annual report with the PUCT as specified in subsection (g)(11) of P.U.C. Subst. R. 25.173, Goal for Renewable Energy;

(p) Monitor the operational status of participating renewable energy generation facilities in Texas and record retirements;

(q) Compute and apply a revised Capacity Conversion Factor (CCF) (as described in Section 14.9.2, Capacity Conversion Factor) every two years;

(r) Audit MWh production data from certified REC generating facilities;

(s) Audit MWh production from renewable energy generation facilities producing offsets for Retail Entities on an annual basis;

(t) Post a list of Facility Identification Numbers, and the associated renewable energy generation facility name, location, type, and noncompetitive certification data on the Market Information System (MIS) Public Area; and

(u) Receive, implement and protect the confidentiality of Electric Service Identifiers (ESI IDs), identity of Retail Electric Provider (REP), and consumption data associated with transmission-level Customers that choose to have their Load excluded from the RPS calculation consistent with Section 14.5.3, End-Use Customers, and subsection (j) of P.U.C. Subst. R. 25.173.

14.2.1 Site Visits

(1) ERCOT may conduct site visits to renewable energy generation facilities on a random basis to ensure integrity of the REC Trading Program, as deemed necessary. ERCOT shall require each registered renewable energy generator to provide one or more contact persons for purpose of site visit notification. ERCOT shall provide at least 48 hours’ notice to the designated contact(s) prior to conducting a site visit for Intermittent Renewable Resources (IRRs) only.

14.3 Creation of Renewable Energy Credit Accounts and Attributes of Renewable Energy Credits

14.3.1 Creation of Renewable Energy Credit Accounts

(1) ERCOT shall create Renewable Energy Credit (REC) Accounts for any party desiring to participate in the REC Trading Program. ERCOT shall require all holders of REC Accounts to execute a Standard Form Market Participant Agreement (as provided for in Section 22, Attachment A, Standard Form Market Participant Agreement) with ERCOT. Each party requesting a REC Account must name a Designated Representative. The Designated Representative must have the authority to represent and legally bind the REC Account Holder in all matters pertaining to the REC Trading Program. These individuals will be the contact persons for ERCOT on matters regarding a REC Account.

***14.3.2 Attributes of Renewable Energy Credits and Compliance Premiums***

(1) A REC or Compliance Premium is a tradable instrument that represents all of the renewable attributes associated with one MWh of production from a certified renewable generator. A REC or Compliance Premium may trade separately from energy. RECs are distributed to REC generators on a quarterly basis by ERCOT. The number of RECs distributed to a certified generator is based on physically metered MWh production. RECs may be traded, transferred, and retired.

(2) Compliance Premiums are awarded by the Program Administrator in conjunction with a REC that is generated by a renewable energy Resource that is not powered by wind and meets the criteria of subsection (l) of P.U.C. Subst. R. 25.173, Goal for Renewable Energy. For the purpose of the Renewable Portfolio Standard (RPS) requirements, one Compliance Premium is equal to one REC.

(3) The components of a REC and Compliance Premium are defined in the table below.

|  |  |  |
| --- | --- | --- |
| **REC Information** | **Field Length** | **Description** |
| Year | 4 Digits | Year REC was issued. |
| Quarter | 1 Digit | Quarter REC was issued. |
| Type of Renewable Resource | 20 Characters | Reference to type of renewable Resource: Solar, wind, biomass, tidal, geothermal, hydro, landfill gas, other. |
| Facility Identification Number | 5 Digits | Number to be assigned by ERCOT. |
| REC Number | 8 Digits | REC Number 1 through the number of MWh generated by the facility during the quarter. |

(4) The Facility Identification Number assigned by ERCOT will be fixed for a facility’s lifetime, and will therefore remain constant regardless of changes in facility name or ownership. Facilities must file changes of name, ownership, or other relevant certification information with ERCOT within 30 days of such changes.

(5) Generating facilities that lose their Public Utility Commission of Texas (PUCT) REC generator certification will not be awarded RECs by ERCOT subsequent to the date of the certification revocation, unless ERCOT is otherwise directed by the PUCT.

(6) A REC or Compliance Premium will have an issue date of the Compliance Period in which it is generated.

(7) RECs and Compliance Premiums have a useful life of three Compliance Periods. For example, a qualifying MWh of renewable energy generated on December 31, 2006 will be the basis for a REC having an issue date of 2006. The three Compliance Periods for which this REC may be used are 2006, 2007, and 2008. This REC will expire one Business Day after March 31, 2009. March 31 is the date by which a Retail Entity must submit its annual REC compliance retirement information to ERCOT.

14.4 Registration to Become a Renewable Energy Credit Generator or Renewable Energy Credit Aggregator

(1) Renewable Energy Credit (REC) generators or REC aggregators must apply to the Public Utility Commission of Texas (PUCT) for certification to produce or aggregate RECs. On receipt of a copy of a notification from the PUCT certifying that a renewable energy generation facility is eligible to generate or an Entity is eligible to aggregate RECs, ERCOT shall establish a REC trading account for the facility or Entity. Each REC trading account shall have a unique identification number.

(2) ERCOT may close an account holding no RECs or Compliance Premiums for a period of one year after providing 30 days’ advance Notice to the REC Account Holder.

14.5 Reporting Requirements

14.5.1 Renewable Energy Credit Generators and Renewable Energy Credit Offset Generators

(1) All Renewable Energy Credit (REC) generators and REC offset generators must report quarterly MWh production data to ERCOT no later than the 38th day after the last Operating Day of the quarter, in an electronic format prescribed by ERCOT. The reported MWh quantity shall be solely produced from, and attributable to, a renewable generator as so designated by the Public Utility Commission of Texas (PUCT). Information relevant to quarterly reporting shall be handled in one of the following processes:

(a) A renewable Generation Resource or Settlement Only Generator (SOG) that has interval meters, pursuant to Section 10, Metering, and has interval metered generation data provided to ERCOT for energy Settlement will:

(i) Have the quarterly reporting function performed on their behalf by ERCOT using the Settlement Quality Meter Data extracted from the ERCOT Settlement system; or

(ii) Self-report their Settlement quality MWh production data to ERCOT, in a format and on a timeline prescribed by ERCOT, based on Metering Facilities that are:

(A) Installed, operated and maintained by the REC generator;

(B) Installed in a location to only record energy from generation certified by the PUCT to receive RECs;

(C) Compliant with American National Standards Institute (ANSI) C12, Code for Electricity Metering, metering accuracy standards; and

(D) Verified for accuracy every six years.

(b) REC aggregators shall report production from microgenerator renewable energy Resources that are not interval metered for energy Settlement, in accordance with the methodology approved by the PUCT for the purposes of measuring the REC production of such Resources, in the format prescribed by ERCOT, including applicable supporting documentation;

(c) All other REC generators, not specifically covered in items (a) and (b) above, must report Settlement quality MWh production data to ERCOT in a format and on a timeline prescribed by ERCOT; provided that REC generators not interconnected to any Transmission and/or Distribution Service Provider (TDSP) may use performance measures for REC production as approved by the PUCT; or

(d) Entities certified to produce RECs from landfill gas supplied directly to a gas distribution system operated by a Municipally Owned Utility (MOU) shall report the MWh equivalent production data and supporting calculations to ERCOT on a timeline prescribed by ERCOT.

(2) From time to time, or as determined to be necessary by ERCOT or the PUCT, Entities may be required to submit supporting documentation to allow verification of generation quantities.

(3) The failure of a REC generator to report generation data in a timely fashion shall result in a delay in the issuance of RECs or Compliance Premiums for that generation facility for that quarter. RECs or Compliance Premiums delayed by untimely reporting will be awarded during the REC award period next occurring after the required data are reported. The issue date of such RECs or Compliance Premiums will be based on the quarter in which the RECs or Compliance Premiums were actually generated.

***14.5.2 Retail Entities***

(1) To enable Retail Entities the ability to calculate their Renewable Portfolio Standard (RPS) requirements, all Retail Entities serving Load in the state of Texas shall provide Load data to ERCOT on a monthly basis, and no later than the 38th day after the last Operating Day of the month, in an electronic format prescribed by ERCOT. The reported MWh quantity shall be solely the energy consumed by Customers in Texas. Load data shall be provided in one of the following processes:

(a) Retail Entities serving Load located within ERCOT shall have this function performed for them by ERCOT for the Load served within ERCOT. The data supplied by ERCOT shall be Settlement Quality Meter Data extracted from the ERCOT Settlement system; or

(b) Entities participating in the REC Trading Program that serve Load outside the ERCOT Region must report Settlement quality MWh Load data for Load served outside the ERCOT Region to ERCOT in a format prescribed by ERCOT.

(i) Entities reporting under paragraph (b) shall not include any MWhs served to a location for which a Customer has submitted a notice letter pursuant to subsection (j) of P.U.C. Subst. R 25.173, Goal for Renewable Energy.

(ii) Notwithstanding the foregoing reporting requirements, such Entities shall submit monthly MWh Load data for December of each year by no later than January 15 of the following year. Any error in estimating December Load shall be corrected by the submitting Entity in the following year’s true-up calculation as per subsection (h)(3) of P.U.C. Subst. R. 25.173.

(2) On a monthly basis, ERCOT shall calculate the MWh consumption of energy by Customers served by Retail Entities in Texas, using Load data submitted by program participants. ERCOT shall adjust the Load data to ensure that any Load (MWh) covered by notice consistent with Section 14.5.3, End-Use Customers, is removed.

(3) The failure of a Retail Entity to report required Load data (including Load data for Electric Service Identifiers (ESI IDs) or accounts covered by notice, as specified in Section 14.5.3) in accordance with the Protocols shall result in estimation of Load data for the applicable Retail Entity by ERCOT for purposes of allocation of annual RPS requirements.

14.5.3 End-Use Customers

(1) To enable ERCOT to determine the total retail sales of all Retail Entities and the retail sales of a specific Retail Entity for Section 14.9.3.1, Preliminary Renewable Portfolio Standard Requirement for Retail Entities, and Section 14.9.5, Final Renewable Portfolio Standard Requirement, a transmission-level voltage Customer that wishes to have its Load excluded from RPS calculations pursuant to subsection (j) of P.U.C. Subst. R. 25.173, Goal for Renewable Energy, must submit the information in accordance with the rule.

**14.6 Awarding of Renewable Energy Credits**

(1) Following the end of each calendar quarter, and before the end of the next Business Day following receipt of all Renewable Energy Credit (REC) generator and Load data specified in Section 14.5.1, Renewable Energy Credit Generators and Renewable Energy Credit Offset Generators, and in Section 14.5.2, Retail Entities, ERCOT will credit RECs to the appropriate REC trading account. ERCOT shall base the number of RECs to be issued on the MWh generation data provided by REC generators or ERCOT as applicable. The number of RECs issued to a specific REC generator will be equal to the number of MWh generated by the certified generator during the quarter. Quarterly production shall be rounded to the nearest whole MWh, with fractions of 0.5 MWh or greater rounded up. If a REC generator is decertified during the quarter, RECs will be issued on MWhs produced during the quarter until the date and time of decertification.

14.6.1 Adjustments to Renewable Energy Credit Award Calculations

(1) Adjustments (reductions) to REC awards are made for renewable facilities that use more than 2% fossil fuel, renewable facilities that are repowered, and for REC aggregators that use estimation techniques to report generation.

(a) Co-Fired Generator Adjustments:

(i) For REC generators using a renewable energy technology that requires the use of fossil fuel that is greater than 2%, and less than or equal to 25%, of the total annual fuel input on a British Thermal Unit (BTU) or equivalent basis, RECs can only be earned on the renewable portion of the production. RECs are awarded based on an adjusted number of MWh generated during the quarter.

(ii) The renewable energy Resource shall calculate the electricity generated by the unit in MWh, based on the BTUs (or equivalent) produced by the fossil fuel and the efficiency of the renewable energy Resource, subtract the MWh generated with fossil fuel input from the total MWh of generation and report the renewable energy generated to the Program Administrator;

(b) Repowered Facility Adjustments:

(i) A Repowered Facility is eligible to earn RECs on all renewable energy produced up to a capacity of 150 MW. Capacity greater than 150 MW may earn RECs for the energy produced in proportion to 150 divided by nameplate capacity.

(ii) Repowered Facilities with a generation capacity greater than 150 MW will be awarded RECs based on an adjusted number of MWh generated during the quarter.

AdjustedMWh = HO *q* (150 / NC)

The above variables are defined as follows:

|  |  |  |
| --- | --- | --- |
| **Variable** | **Unit** | **Description** |
| HO q | MWh | Total production or historical output by the Repowered Facility for quarter “q” |
| NC | None | Nameplate capacity is the machine generation capacity posted on a specific piece of equipment or unit |

(c) REC Aggregator Adjustments:

The REC aggregator may provide the Program Administrator with sufficient information for the Program Administrator to estimate with reasonable accuracy the output of each unit, based on known or observed information that correlates closely with the generation output. REC aggregators using approved estimation techniques to report renewable energy production shall be awarded one REC for every 1.25 MWh generated.

14.6.2 Awarding of Compliance Premiums

(1) A Compliance Premium is awarded by the Program Administrator in conjunction with a REC that is generated by a renewable energy Resource installed and certified after September 1, 2005 that is not powered by wind. For the purpose of the Renewable Portfolio Standard (RPS) requirements, one Compliance Premium is equal to one REC.

(2) One Compliance Premium shall be awarded for each REC awarded for energy generated after December 31, 2007.

**14.7 Transfer of Renewable Energy Credits or Compliance Premiums Between Parties**

(1) On the receipt of a request from the owner of a Renewable Energy Credit (REC) or Compliance Premium and purchaser of the REC or Compliance Premium, ERCOT will transfer the REC or Compliance Premium from the owner’s REC trading account to the REC trading account specified in the transfer request. Transfer requests received by ERCOT shall be effective upon confirmation by the receiving Entity.

(2) If a request for transfer cannot be executed, ERCOT will notify the requesting Entities of the reason.

(3) On completing a transfer, ERCOT shall notify the Designated Representatives of all involved REC trading account owners by e-mail.

(4) For the purpose of the REC Trading Program, RECs or Compliance Premiums residing in an Entity’s REC trading account are deemed to be owned by that Entity.

(5) To the extent practicable, ERCOT will accommodate automated quarterly transfers.

**14.8 Renewable Energy Credit Offsets**

(1) To qualify for Renewable Energy Credit (REC) offsets in the REC Trading Program, a Retail Electric Provider (REP), Municipally Owned Utility (MOU), generation and transmission cooperative, distribution cooperative, or an affiliate of a REP, MOU, generation and transmission cooperative, or distribution cooperative must apply for REC offsets from the Public Utility Commission of Texas (PUCT) by June 1, 2001. This requirement is in effect without regard to whether or not the applicant will be a Retail Entity on January 1, 2002. A REC offset represents one MWh of renewable energy from a renewable energy generator placed in service before September 1, 1999 that may be used in place of a REC to meet a renewable energy requirement. REC offsets may not be traded.

(2) After receipt of Notification from the PUCT (which shall include the name of the Entity receiving the offset, the name of the generator eligible to produce the offset, the value of the offset in MWh, and other information as applicable) verifying designation by the Entity receiving REC offsets, ERCOT shall use REC offsets from a Retail Entity as part of its calculation of Final RPS Requirements (FRRs). REC offsets are not transferable. REC offsets will be considered valid until ERCOT receives Notification from the PUCT that the offset is no longer valid.

(3) For purposes of P.U.C. Subst. R. 25.173, Goal for Renewable Energy, a generation and transmission cooperative shall be responsible for the cumulative total of its cooperative members’ renewable energy requirements as well as its affiliated cooperative members’ renewable energy requirements. At the election of its board of directors, a generation and transmission cooperative will become responsible for the cumulative total of its distribution cooperatives’ Renewable Portfolio Standard (RPS) requirements. The sharing of the REC offsets of the generation and transmission cooperative among its distribution cooperatives shall not affect the cumulative total of the RPS requirements of the distribution cooperative members, or its affiliated cooperative members in meeting their share of the state’s goals for renewable energy Resources.

**14.9 Allocation of Statewide Renewable Portfolio Standard Requirement Among Retail Entities**

(1) The first quarter of each year shall be the Settlement period for the preceding Compliance Period. During this Settlement period each year the following actions shall occur:

(a) No later than the date set forth in P.U.C. Subst. R. 25.173, Goal for Renewable Energy, the Program Administrator shall allocate the Statewide RPS Requirement (SRR) for the previous year’s Compliance Period among all Retail Entities in the state. This allocation represents the Renewable Energy Credit (REC) compliance requirements for the preceding Compliance Period. To perform this calculation, ERCOT shall use Load data provided to it as set forth in these Protocols.

(b) By the date set forth in P.U.C. Subst. R. 25.173, the Program Administrator shall notify each Retail Entity of its Final RPS Requirement (FRR) for the previous Compliance Period.

(c) The Program Administrator may request from the Public Utility Commission of Texas (PUCT) an adjustment to the deadlines set forth in this Section if certain factors, including but not limited to changes to the ERCOT Settlement Calendar, should affect the timely availability of reliable retail sales data or renewable Resource generation data necessary for calculating Renewable Portfolio Standard (RPS) requirements.

14.9.1 Annual Capacity Targets

(1) The renewable energy capacity targets (in megawatts) for each year are as follows:

|  |  |  |  |
| --- | --- | --- | --- |
| **Annual Capacity Target**  **(MW)** | **Existing Renewable Capacity (MW)** | **Total Renewable Capacity Target (MW)** | **Compliance Period**  **(Years)** |
| 400 | 880 | 1280 | 2002, 2003 |
| 850 | 880 | 1730 | 2004, 2005 |
| 1400 | 880 | 2280 | 2006, 2007 |
| 2392 | 880 | 3272 | 2008, 2009 |
| 3384 | 880 | 4264 | 2010, 2011 |
| 4376 | 880 | 5256 | 2012, 2013 |
| 5000 | 880 | 5880 | 2014, and each year after 2014 |

(2) ERCOT shall increase the new renewable energy capacity target for all future Compliance Periods to account for:

(a) Capacity producing RECs from eligible qualifying out-of-state facilities metered in Texas; and

(b) Capacity from a renewable energy generator placed in service before September 1, 1999 that has been retired or otherwise removed from the program and results in a statewide existing renewable capacity of less than 880 MW.

ERCOT shall apply any such changes for out-of-state capacity and retirements at such time the revised Capacity Conversion Factor (CCF) is computed and applied.

(3) RECs may be produced by generators certified by the PUCT which are not located in Texas if:

(a) The first metering point for such generation is in Texas; and

(b) All generation metered at the location of injection into the Texas grid comes from that generator.

(4) REC generators physically located outside the state of Texas are not included in the annual calculations of installed renewable capacity for purposes of the REC Trading Program. However, as such generation may contribute to the available pool of RECs, it is conceivable that there may be sufficient RECs to allow Retail Entities to meet their annual requirements, while at the same time, a target capacity shortfall for installed renewable capacity in Texas could exist.

14.9.2 Capacity Conversion Factor

(1) ERCOT shall set the CCF to allocate credits to Retail Entities. The CCF shall be calculated during the fourth quarter of each odd numbered compliance year. ERCOT shall determine a new CCF as follows:

Individual Facility CCF *i =* (12/n)\*HO *i, t* / (HC *i, t* \*8760)

The above variables are defined as follows:

|  |  |  |
| --- | --- | --- |
| **Variable** | **Unit** | **Description** |
| *i* | None | Individual renewable energy generation facility |
| n | None | Number of months a specific renewable energy generation facility was in operation over the past 24 months. *n* must be greater than or equal to 12 and less than or equal to 24. |
| HO *i, t* | MWh | Total production by participating renewable generator *i* during Compliance Period *t*. |
| HC *i, t* | MW | Average total generation capacity by participating renewable generator *i* during Compliance Period *t*. |

and

CCF =  (CCF *i* \* PC *i*) / PC *i*

The above variables are defined as follows:

|  |  |  |
| --- | --- | --- |
| **Variable** | **Unit** | **Description** |
| *q* | None | The total number of renewable energy generation facilities in the REC Trading Program |
| PC *i* | MW | Participating Capacity as of September 30 of the year the revised CCF is calculated for renewable energy generation facility *i* in the state of Texas participating in the REC Trading Program for which at least 12 months of operating data are available. |

(2) The CCF shall:

(a) Be based on actual generator performance data for the previous two years for all renewable Resources in the REC Trading Program during that period for which at least 12 months of performance data are available;

(b) Represent a weighted average of generator performance; and

(c) Use all actual generator performance data that are available for each renewable Resource, excluding data for testing periods.

(3) For purposes of calculating historical output from renewable capacity, ERCOT shall keep a list of renewable generators, REC certification dates, and annual MWh generation totals.

(4) ERCOT shall use this revised CCF for the two Compliance Periods immediately after it is set. If the PUCT has determined that the REC Trading Program is failing to meet the statutory targets for renewable energy capacity in Texas, it will instruct ERCOT to use a different number than that which would be calculated using the formula for the CCF. Such requests will be published on the ERCOT Market Information System (MIS) Public Area within ten Business Days of receipt of the letter from the PUCT.

***14.9.3 Statewide Renewable Portfolio Standard Requirement***

(1) ERCOT shall determine the SRR for a particular Compliance Period as follows:

SRR = (ACT  8760  CCF) + RCP

The above variables are defined as follows:

|  |  |  |
| --- | --- | --- |
| **Variable** | **Unit** | **Description** |
| ACT | MW | Annual Capacity Target for new renewable energy generation facilities. |
| 8760 | None | The number of hours in a year. |
| CCF | None | Capacity Conversion Factor. |
| RCP | None | The number of Compliance Premiums retired during the previous Compliance Period. |

**14.9.3.1 Preliminary Renewable Portfolio Standard Requirement for Retail Entities**

(1) ERCOT shall determine each Retail Entity’s Preliminary RPS Requirement as follows:

Preliminary RPS Requirement *i*= SRR \* (CRSRES *i* / TS)

The above variables are defined as follows:

|  |  |  |
| --- | --- | --- |
| **Variable** | **Unit** | **Description** |
| *i* | None | Specific Retail Entity. |
| SRR | REC | Statewide RPS requirement. |
| CRSRES i | MWh | Retail sales of the specific Retail Entity to Texas Customers during the Compliance Period, excluding sales by the specific Retail Entity to any Electric Service Identifiers (ESI IDs) or accounts for which an opt-out notice has been submitted under subsection (j) of P.U.C. Subst. R. 25.173, Goal for Renewable Energy. |
| TS | MWh | Total retail sales of all Retail Entities to Texas Customers during the Compliance Period, excluding all sales of all Retail Entities to ESI IDs or accounts for which an opt-out notice has been submitted under subsection (j) of P.U.C. Subst. R. 25.173. |

(2) The sum of the Preliminary RPS Requirements for all Retail Entities shall be equal to the SRR.

***14.9.4 Application of Offsets - Adjusted Renewable Portfolio Standard Requirement***

(1) For a Retail Entity that has been awarded offsets by the PUCT, ERCOT shall subtract the REC offset amount from the Preliminary RPS Requirement. The reduction shall not exceed what would be necessary for the Final RPS Requirement to be zero. The total MWh reduction in the Preliminary RPS Requirement for all Retail Entities constitutes Total Useable Offsets (TUOs).

(2) ERCOT shall determine each Retail Entity’s Adjusted RPS Requirement (ARR) as follows:

ARR *i*= Preliminary RPS Requirement *i* – EO *i*

The above variables are defined as follows:

|  |  |  |
| --- | --- | --- |
| **Variable** | **Unit** | **Description** |
| *i* | None | Specific Retail Entity. |
| EO *i* | None | Total offsets the Retail Entity is entitled to receive during the Compliance Period (not to exceed the Retail Entity’s FRR before adjustment for any previous Compliance Period). |

(3) ERCOT shall determine TUOs as follows:

TUO = SRR – ARR *i*

The above variables are defined as follows:

|  |  |  |
| --- | --- | --- |
| **Variable** | **Unit** | **Description** |
| *i* | None | Specific Retail Entity. |
| *n* | None | Number of Retail Entities. |
| SRR | None | Statewide RPS Requirement. |
| ARR *i* | None | Adjusted RPS Requirement for a specific Retail Entity. |

***14.9.5 Final Renewable Portfolio Standard Requirement***

(1) ERCOT shall redistribute the TUO amount over all Retail Entities to determine the FRRs. ERCOT shall determine each Retail Entity’s FRR as follows:

FRR = ARR *i* + (TUO × (CRSRES *i* / TS)) +/- Previous Year(s) FRR adjustment (recalculated in accordance with subsection (h)(3) of P.U.C. SUBST. R. 25.173, Goal for Renewable Energy)

The above variables are defined as follows:

| **Variable** | **Unit** | **Description** |
| --- | --- | --- |
| ARR *i* | None | Adjusted RPS Requirement for a specific Retail Entity. |
| TUO | None | Total Usable Offsets. |
| CRSRES *i* | MWh | Retail sales of the Retail Entity to Texas Customers during the Compliance Period, excluding sales by the specific Retail Entity to any ESI IDs or accounts for which an opt-out notice has been submitted under subsection (j) of P.U.C. Subst. R. 25.173. |
| TS | MWh | Total retail sales of all Retail Entities to Texas Customers during the Compliance Period, excluding all sales or accounts of all Retail Entities to ESI IDs for which an opt-out notice has been submitted under subsection (j) of P.U.C. Subst. R. 25.173. |

(2) This process will be an iterative process that will solve until the optimal allocation is reached with all FRRs resolved to the nearest whole REC.

(3) ERCOT shall notify each Retail Entity of its FRR for the previous Compliance Period no later than the date set forth for such Notification in subsection (n)(l) of P.U.C. Subst. R. 25.173.

**14.10 Retiring of Renewable Energy Credits or Compliance Premiums**

(1) A Renewable Energy Credit (REC) or Compliance Premium owner’s Designated Representative must submit retirement requests to ERCOT. RECs or Compliance Premiums specified by a Designated Representative for retirement must be in the REC trading account from which they are being retired at the time the request is submitted. ERCOT shall retire such RECs or Compliance Premiums by removing them from the party’s REC trading account and retiring the unique serial number, thus rendering the REC or Compliance Premium unusable for any other purpose. ERCOT shall maintain records to archive all RECs or Compliance Premiums that have been retired and to identify the basis on which RECs or Compliance Premiums were retired. The reasons for retiring RECs include mandatory compliance, voluntary retirement, and expiration. The reasons for retiring Compliance Premiums include mandatory compliance, voluntary retirement, and expiration.

***14.10.1 Mandatory Retirement***

(1) For each Compliance Period, by the date set forth in subsection (n)(2) of P.U.C. Subst. R. 25.173, Goal for Renewable Energy, each Retail Entity’s Designated Representative shall notify ERCOT of the RECs or Compliance Premiums in its REC trading account to be used (retired) to satisfy its Final RPS Requirement (FRR) for the Compliance Period being settled. Each REC or Compliance Premium that is not used will remain in the holder’s REC trading account until it is transferred to another party’s account, expires, or is otherwise retired.

(2) Failure to provide sufficient RECs or Compliance Premiums by the date set forth in subsection (n)(2) of P.U.C. Subst. R. 25.173 shall be considered a failure of that Retail Entity to meet its REC retirement obligations. ERCOT shall notify the Public Utility Commission of Texas (PUCT) when any Retail Entity fails to meets its REC retirement obligations.

***14.10.2 Voluntary Retirement***

(1) At the request of a REC Account Holder, ERCOT shall retire RECs and Compliance Premiums for reasons other than for meeting the mandated Renewable Portfolio Standard (RPS) requirements. Voluntarily retired RECs and Compliance Premiums may not be used to satisfy a Retail Entity’s RPS requirement. ERCOT shall include information concerning RECs and Compliance Premiums retired voluntarily in its annual report to the PUCT.

***14.10.3 Retiring Unused Renewable Energy Credits or Compliance Premiums***

(1) ERCOT shall retire all unused RECs and Compliance Premiums upon their expiration as described in Section 14.3.2, Attributes of Renewable Energy Credits and Compliance Premiums.

**14.11 Penalties and Enforcement**

(1) ERCOT is not responsible for developing, administering, or enforcing penalties associated with the Renewable Energy Credit (REC) Trading Program; these activities are within the scope of the Public Utility Commission of Texas (PUCT). ERCOT is responsible for informing the PUCT of Retail Entities that do not meet their REC or Compliance Premium retirement obligations, of REC offset generators that do not produce generation sufficient to cover offsets they have been approved to provide, and of other anomalies which may come to ERCOT’s attention through the administration of the REC Trading Program.

**14.12 Maintain Public Information**

(1) ERCOT shall maintain public information of interest to buyers and sellers of Renewable Energy Credits (RECs) or Compliance Premiums on the ERCOT Market Information System (MIS) Public Area. The information provided shall include, at a minimum, a directory of all REC generators, Retail Entities, and other participants in the REC Trading Program. The directory shall include the following information:

(a) Name of the REC generator, Retail Entity, or other REC Account Holder;

(b) Name of the Designated Representative;

(c) Street address or post office box number;

(d) City, state or province, and zip or postal code;

(e) Country (if not the United States);

(f) Phone number;

(g) Fax number;

(h) E-mail address (with hypertext link); and

(i) Website address (with hypertext link).

(2) REC Account Holders shall describe their participation in the REC Trading Program using one or more of the following choices within a checkbox listing: REC generator, Retail Entity, REC broker, REC trader, REC trading exchange, REC aggregator, or other.

(3) Entities are responsible for notifying ERCOT of changes in the above information.

(4) ERCOT shall conspicuously display the following disclaimer in upper case and in bold font:

**DISCLAIMER: ERCOT DOES NOT KNOW OR ENDORSE THE CREDIT WORTHINESS OR REPUTATION OF ANY REC ACCOUNT HOLDER LISTED IN THIS DIRECTORY.**

(5) ERCOT may provide other information that describes the REC Trading Program, as it deems convenient or necessary for administering the REC Trading Program. ERCOT shall maintain a hypertext link to the appropriate pages on the Public Utility Commission of Texas’ (PUCT’s) website that are related to the REC Trading Program.

(6) ERCOT shall post each month the best available aggregated total energy sales (in MWh) of Retail Entities in Texas for the previous month and year-to-date for the calendar year. This posting shall be based on Retail Entity Loads provided in accordance with Section 14.5.2, Retail Entities.

(7) ERCOT shall post a list of Facility Identification Numbers, associated names, locations, and types.

**14.13 Submit Annual Report to Public Utility Commission of Texas**

(1) Beginning in 2002, ERCOT shall submit an annual report to the Public Utility Commission of Texas (PUCT) on or before the date set forth for such report in subsection (g)(11) of P.U.C. Subst. R. 25.173, Goal for Renewable Energy. Such report shall contain the following information pertaining to program operation for the previous Compliance Period:

(a) MW of existing renewable capacity installed in Texas, by technology type;

(b) MW of new renewable energy capacity installed in Texas, by technology type;

(c) List of eligible non-Texas capacity participating in the program, by technology type;

(d) Summary of Renewable Energy Credit (REC) aggregator activities, submitted in a format specified by the PUCT;

(e) Owner/operator of each REC generating facility;

(f) Date each new renewable energy facility began to produce energy;

(g) MWh of energy generated by renewable energy Resources as demonstrated through data supplied in accordance with these Protocols;

(h) List of renewable energy unit retirements;

(i) List of all Retail Entities participating in the REC Trading Program;

(j) Final RPS Requirement (FRR) of each Retail Entity;

(k) Number of REC offsets used by each Retail Entity;

(l) A list of REC offset generators, REC offsets awarded and MWh production from each such generator on an annual basis;

(m) Number of RECs retired by each program participant by category (mandatory compliance, voluntary retirement, expiration, and total retirements);

(n) Number of Compliance Premiums retired by each program participant by category (mandatory compliance, expiration, and total retirements);

(o) List of all Retail Entities in compliance with Renewable Portfolio Standard (RPS) requirement; and

(p) List of all Retail Entities not in compliance with RPS requirement including the number of RECs by which they were deficient.