

The Public Utility Commission of Texas (commission) adopts an amendment to §25.173, relating to Goal for Renewable Energy with no changes to the proposed text as published in the February 11, 2000 *Texas Register* (25 TexReg 1016). The amendment is necessary to restore statutory language inadvertently omitted from the definition of the term "renewable energy technology" and to change an incorrect reference listed within the rule. This amendment was adopted under Project Number 21232.

The commission received no comments on the proposed amendment.

This amendment is adopted under the Public Utility Regulatory Act, Texas Utilities Code Annotated §14.002 (Vernon 1998) (PURA) which provides the commission with the authority to make and enforce rules reasonably required in the exercise of its powers and jurisdiction; and specifically, PURA §39.904, which requires the commission to promote the development of renewable energy technologies.

Cross Reference to Statutes: Public Utility Regulatory Act §14.002 and §39.904.

§25.173. Goal for Renewable Energy.

- (a) **Purpose.** The purpose of this section is to ensure that an additional 2,000 megawatts (MW) of generating capacity from renewable energy technologies is installed in Texas by 2009 pursuant to the Public Utility Regulatory Act (PURA) §39.904, to establish a renewable energy credits trading program that would ensure that the new renewable energy capacity is built 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, to respond to customers' expressed preferences for renewable resources by ensuring that all customers have access to providers of energy generated by renewable energy resources pursuant to PURA §39.101(b)(3), and to ensure that the cumulative installed renewable capacity in Texas will be at least 2,880 MW by January 1, 2009.
- (b) **Application.** This section applies to power generation companies as defined in §25.5 of this title (relating to definitions), and competitive retailers as defined in subsection (c) of this section. This section shall not apply to an electric utility subject to PURA §39.102(c) until the expiration of the utility's rate freeze period.

(c) **Definitions.**

- (1) **Competitive retailer**—A municipally-owned utility, generation and transmission cooperative (G&T), or distribution cooperative that offers customer choice in the restructured competitive electric power market in Texas or a retail electric provider (REP) as defined in §25.5 of this title.
- (2) **Compliance period**—A calendar year beginning January 1 and ending December 31 of each year in which renewable energy credits are required of a competitive retailer.
- (3) **Designated representative**—A responsible natural person authorized by the owners or operators of a renewable resource to register that resource with the program administrator. The designated representative must have the authority to represent and legally bind the owners and operators of the renewable resource in all matters pertaining to the renewable energy credits trading program.
- (4) **Early banking**—Awarding renewable energy credits (RECs) to generators for sale in the trading program prior to the program's first compliance period.
- (5) **Existing facilities**—Renewable energy generators placed in service before September 1, 1999.
- (6) **Generation offset technology**—Any renewable technology that reduces the demand for electricity at a site where a customer consumes electricity. An example of this technology is solar water heating.

- (7) **New facilities**—Renewable energy generators placed in service on or after September 1, 1999. A new facility includes the incremental capacity and associated energy from an existing renewable facility achieved through repowering activities undertaken on or after September 1, 1999.
- (8) **Off-grid generation**—The generation of renewable energy in an application that is not interconnected to a utility transmission or distribution system.
- (9) **Program administrator**—The entity approved by the commission that is responsible for carrying out the administrative responsibilities related to the renewable energy credits trading program as set forth in subsection (g) of this section.
- (10) **REC offset (offset)**—An REC offset represents one MWh of renewable energy from an existing facility that may be used in place of an REC to meet a renewable energy requirement imposed under this section. REC offsets may not be traded, shall be calculated as set forth in subsection (i) of this section, and shall be applied as set forth in subsection (h) of this section.
- (11) **Renewable energy credit (REC or credit)**—An REC represents one megawatt hour (MWh) of renewable energy that is physically metered and verified in Texas and meets the requirements set forth in subsection (e) of this section.
- (12) **Renewable energy credit account (REC account)**—An account maintained by the renewable energy credits trading program administrator for the purpose of tracking the production, sale, transfer, purchase, and retirement of RECs by a program participant.

- (13) **Renewable energy credits trading program (trading program)**—The process of awarding, trading, tracking, and submitting RECs as a means of meeting the renewable energy requirements set out in subsection (d) of this section.
- (14) **Renewable energy resource (renewable resource)**— A resource that produces energy derived from renewable energy technologies.
- (15) **Renewable energy technology**—Any technology that exclusively relies on an energy source that is naturally regenerated over a short time and derived directly from the sun, indirectly from the sun, or from moving water or other natural movements and mechanisms of the environment. Renewable energy technologies include those that rely on energy derived directly from the sun, on wind, geothermal, hydroelectric, wave, or tidal energy, or on biomass or biomass-based waste products, including landfill gas. A renewable energy technology does not rely on energy resources derived from fossil fuels, waste products from fossil fuels, or waste products from inorganic sources.
- (16) **Repowering**—Modernizing or upgrading an existing facility in order to increase its capacity or efficiency.
- (17) **Settlement period**—The first calendar quarter following a compliance period in which the settlement process for that compliance year takes place.
- (18) **Small producer**—A renewable resource that is less than two megawatts (MW) in size.

- (d) **Renewable energy credits trading program (trading program).** Renewable energy credits may be generated, transferred, and retired by renewable energy power generators, competitive retailers, and other market participants as set forth in this section.
- (1) The program administrator shall apportion a renewable resource requirement among all competitive retailers as a percentage of the retail sales of each competitive retailer as set forth in subsection (h) of this section. Each competitive retailer shall be responsible for retiring sufficient RECs as set forth in subsections (h) and (k) of this section to comply with this section. The requirement to purchase RECs pursuant to this section becomes effective on the date each competitive retailer begins serving retail electric customers in Texas.
 - (2) A power generating company may participate in the program and may generate RECs and buy or sell RECs as set forth in subsection (j) of this section.
 - (3) RECs shall be credited on an energy basis as set forth in subsection (j) of this section.
 - (4) Municipally-owned utilities and distribution cooperatives that do not offer customer choice are not obligated to purchase RECs. However, regardless of whether the municipally-owned utility or distribution cooperative offers customer choice, a municipally-owned utility or distribution cooperative possessing renewable resources that meet the requirements of subsection (e) of this section may sell RECs generated by such a resource to competitive retailers as set forth in subsection (j) of this section.
 - (5) Except where specifically stated, the provisions of this section shall apply uniformly to all participants in the trading program.

(e) **Facilities eligible for producing RECs in the renewable energy credits trading program.**

For a renewable facility to be eligible to produce RECs in the trading program it must be either a new facility or a small producer as defined in subsection (c) of this section and must also meet the requirements of this subsection:

- (1) A renewable energy resource must not be ineligible under subsection (f) of this section and must register pursuant to subsection (n) of this section;
 - (2) The facility's above-market costs must not be included in the rates of any utility, municipally-owned utility, or distribution cooperative through base rates, a power cost recovery factor (PCRF), stranded cost recovery mechanism, or any other fixed or variable rate element charged to end users;
 - (3) For a renewable energy technology that requires fossil fuel, the facility's use of fossil fuel must not exceed 2.0% of the total annual fuel input on a British thermal unit (BTU) or equivalent basis;
 - (4) The output of the facility must be readily capable of being physically metered and verified in Texas by the program administrator. Energy from a renewable facility that is delivered into a transmission system where it is commingled with electricity from non-renewable resources can not be verified as delivered to Texas customers. A facility is not ineligible by virtue of the fact that the facility is a generation-offset, off-grid, or on-site distributed renewable facility if it otherwise meets the requirements of this section;
- and

- (5) For a municipally owned utility operating a gas distribution system, any production or acquisition of landfill gas that is directly supplied to the gas distribution system is eligible to produce RECs based upon the conversion of the thermal energy in BTUs to electric energy in kWh using for the conversion factor the systemwide average heat rate of the gas-fired units of the combined utility's electric system as measured in BTUs per kWh.
 - (6) For industry-standard thermal technologies, the RECs can be earned only on the renewable portion of energy production. Furthermore, the contribution toward statewide renewable capacity megawatt goals from such facilities would be equal to the fraction of the facility's annual MWh energy output from renewable fuel multiplied by the facility's nameplate MW capacity.
- (f) **Facilities not eligible for producing RECs in the renewable energy credits trading program.** A renewable facility is not eligible to produce RECs in the trading program if it is:
- (1) A renewable energy capacity addition associated with an emissions reductions project described in Health and Safety Code §382.05193, that is used to satisfy the permit requirements in Health and Safety Code §382.0519;
 - (2) An existing facility that is not a small producer as defined in subsection (c) of this section; or
 - (3) An existing fossil plant that is repowered to use a renewable fuel.

- (g) **Responsibilities of program administrator.** No later than June 1, 2000, the commission shall approve an independent entity to serve as the trading program administrator. At a minimum, the program administrator shall perform the following functions:
- (1) Create accounts that track RECs for each participant in the trading program;
 - (2) Award RECs to registered renewable energy facilities on a quarterly basis based on verified meter reads;
 - (3) Assign offsets to competitive retailers on an annual basis based on a nomination submitted by the competitive retailer pursuant to subsection (n) of this section;
 - (4) Annually retire RECs that each competitive retailer submits to meet its renewable energy requirement;
 - (5) Retire RECs at the end of each REC's three-year life;
 - (6) Maintain public information on its website that provides trading program information to interested buyers and sellers of RECs;
 - (7) Create an exchange procedure where persons may purchase and sell RECs. The exchange shall ensure the anonymity of persons purchasing or selling RECs. The program administrator may delegate this function to an independent third party. The commission shall approve any such delegation;
 - (8) Make public each month the total energy sales of competitive retailers in Texas for the previous month;
 - (9) Perform audits of generators participating in the trading program to verify accuracy of metered production data;

- (10) Allocate the renewable energy responsibility to each competitive retailer in accordance with subsection (h) of this section; and
- (11) Submit an annual report to the commission. Beginning with the program's first compliance period, the program administrator shall submit a report to the commission on or before April 15 of each calendar year. The report shall contain information pertaining to renewable energy power generators and competitive retailers. At a minimum, the report shall contain:
 - (A) the amount of existing and new renewable energy capacity in MW installed in the state by technology type, the owner/operator of each facility, the date each facility began to produce energy, the amount of energy generated in megawatt-hours (MWh) each quarter for all capacity participating in the trading program or that was retired from service; and
 - (B) a listing of all competitive retailers participating in the trading program, each competitive retailer's renewable energy credit requirement, the number of offsets used by each competitive retailer, the number of credits retired by each competitive retailer, a listing of all competitive retailers that were in compliance with the REC requirement, a listing of all competitive retailers that failed to retire sufficient REC requirement, and the deficiency of each competitive retailer that failed to retire sufficient RECs to meet its REC requirement.

(h) **Allocation of REC purchase requirement to competitive retailers.** The program administrator shall allocate REC requirements among competitive retailers. Any renewable capacity that is retired before January 1, 2009 or any capacity shortfalls that arise due to purchases of RECs from out-of-state facilities shall be replaced and incorporated into the allocation methodology set forth in this subsection. Any changes to the allocation methodology to reflect replacement capacity shall occur two compliance periods after which the facility was retired or capacity shortfall occurred. The program administrator shall use the following methodology to determine the total annual REC requirement for a given year and the final REC requirement for individual competitive retailers:

(1) The total statewide REC requirement for each compliance period shall be calculated in terms of MWh and shall be equal to the renewable capacity target multiplied by 8,760 hours per year, multiplied by the appropriate capacity conversion factor set forth in subsection (j) of this section. The renewable energy capacity targets for the compliance period beginning January 1, of the year indicated shall be:

- (A) 400 MW of new resources in 2002;
- (B) 400 MW of new resources in 2003;
- (C) 850 MW of new resources in 2004;
- (D) 850 MW of new resources 2005;
- (E) 1,400 MW of new resources in 2006;
- (F) 1,400 MW of new resources in 2007;
- (G) 2,000 MW of new resources in 2008; and

- (H) 2,000 MW of new resources in 2009 through 2019.
- (2) The final REC requirement for an individual competitive retailer for a compliance period shall be calculated as follows:
- (A) Each competitive retailer's preliminary REC requirement is determined by dividing its total retail energy sales in Texas by the total retail sales in Texas of all competitive retailers, and multiplying that percentage by the total statewide REC requirement for that compliance period.
 - (B) The adjusted REC requirement for each competitive retailer that is entitled to an offset is determined by reducing its preliminary REC requirement by the offsets to which it qualifies, as determined under subsection (i) of this section, with the maximum reduction equal to the competitive retailer's preliminary REC requirement. The total reductions for all competitive retailers is equal to the total usable offsets for that compliance period.
 - (C) Each competitive retailer's final REC requirement for a compliance period shall be increased to recapture the total usable offsets calculated under subparagraph (B) of this paragraph. The additional REC requirement shall be calculated by dividing the competitive retailer's adjusted REC requirement by the total adjusted REC requirement of all competitive retailers. This fraction shall be multiplied by the total usable offsets for that compliance period and this amount shall be added to the competitive retailer's adjusted REC requirement to

produce the competitive retailer's final REC requirement for the compliance period.

(i) **Nomination and calculation of REC offsets.**

- (1) A REP, municipally-owned utility, G&T cooperative, distribution cooperative, or an affiliate of a REP, municipally-owned utility, or distribution cooperative, may apply offsets to meet all or a portion of its renewable energy purchase requirement, as calculated in subsection (h) of this section, only if those offsets are nominated in a filing with the commission by June 1, 2001. A G&T may nominate the combined offsets for itself and its member distribution cooperatives upon the presentation of a resolution by its Board authorizing it to do so.
- (2) The commission shall verify any designations of REC offsets and notify the program administrator of its determination by December 31, 2001.
- (3) REC offsets shall be equal to the average annual MWh output of an existing resource for the years 1991-2000 or the entire life of the existing resource, whichever is less.
- (4) REC offsets qualify for use in a compliance period under subsection (h) of this section only to the extent that:
 - (A) The resource producing the REC offset has continuously since September 1, 1999 been owned by or its output has been committed under contract to a utility, municipally-owned utility, or cooperative nominating the resource under paragraph (1) of this subsection or, if the resource has been committed under a

contract that expired after September 1, 1999 and before January 1, 2002, it is owned by or its output has been committed under contract to a utility, municipally-owned utility, or cooperative on January 1, 2002; and

(B) The facility producing the REC offsets is operated and producing energy during the compliance period in a manner consistent with historic practice.

(5) If the production from a facility producing the REC offset energy ceases for any reason, the competitive retailer may no longer claim the REC offset against its REC requirement.

(j) **Calculation of capacity conversion factor.** The capacity conversion factor used by the program administrator to allocate credits to competitive retailers shall be calculated as follows:

(1) The capacity conversion factor (CCF) shall be administratively set at 35% for 2002 and 2003, the first two compliance periods of the program.

(2) During the fourth quarter of the second compliance year (2003), the CCF shall be readjusted to reflect actual generator performance data associated with all renewable resources in the trading program. The program administrator shall adjust the CCF every two years thereafter and shall:

(A) be based on all renewable energy resources in the trading program for which at least 12 months of performance data is available;

(B) represent a weighted average of generator performance;

(C) use all valid performance data that is available for each renewable resource; and

(D) ensure that the renewable capacity goals are attained.

- (k) **Production and transfer of RECs.** The program administrator shall administer a trading program for renewable energy credits in accordance with the requirements of this subsection.
- (1) A REC will be awarded to the owner of a renewable resource when a MWh is metered at that renewable resource. A generator producing 0.5 MWh or greater as its last unit generated should be awarded one REC on a quarterly basis. The program administrator shall record the amount of metered MWh and credit the REC account of the renewable resource that generated the energy on a quarterly basis.
 - (2) The transfer of RECs between parties shall be effective only when the transfer is recorded by the program administrator.
 - (3) The program administrator shall require that RECs be adequately identified prior to recording a transfer and shall issue an acknowledgement of the transaction to parties upon provision of adequate information. At a minimum, the following information shall be provided:
 - (A) identification of the parties;
 - (B) REC serial number, REC issue date, and the renewable resource that produced the REC;
 - (C) the number of RECs to be transferred; and
 - (D) the transaction date.

- (4) A competitive retailer shall surrender RECs to the program administrator for retirement from the market in order to meet its REC allocation for a compliance period. The program administrator will document all REC retirements annually.
 - (5) On or after each April 1, the program administrator will retire RECs that have not been retired by competitive retailers and have reached the end of their three-year life.
 - (6) The program administrator may establish a procedure to ensure that the award, transfer, and retirement of credits are accurately recorded.
- (l) **Settlement process.** Beginning in January 2003, the first quarter following the compliance period shall be the settlement period during which the following actions shall occur:
- (1) By January 31, the program administrator will notify each competitive retailer of its total REC requirement for the previous compliance period as determined pursuant to subsection (h) of this section.
 - (2) By March 31, each competitive retailer must submit credits to the program administrator from its account equivalent to its REC requirement for the previous compliance period. If the competitive retailer has insufficient credits in its account to satisfy its obligation, and this shortfall exceeds the applicable deficit allowance as set forth in subsection (m)(2) of this section, the competitive retailer is subject to the penalty provisions in subsection (o) of this section.
- (m) **Trading program compliance cycle.**

- (1) The first compliance period shall begin on January 1, 2002 and there will be 18 consecutive compliance periods. Early banking of RECs is permissible and may commence no earlier than July 1, 2001. The program's first settlement period shall take place during the first quarter of 2003.
- (2) A competitive retailer may incur a deficit allowance equal to 5.0% of its REC requirement in 2002 and 2003 (the first two compliance periods of the program). This 5.0% deficit allowance shall not apply to entities that initiate customer choice after 2003. During the first settlement period, each competitive retailer will be subject to a penalty for any REC shortfall that is greater than 5.0% of its REC requirement under subsection (h) of this section. During the second settlement period, each competitive retailer will be subject to the penalty process for any REC shortfall greater than 5.0% of the second year REC allocation. All competitive retailers incurring a 5.0% deficit pursuant to this subsection must make up the amount of RECs associated with the deficit in the next compliance period.
- (3) The issue date of RECs created by a renewable energy resource shall coincide with the beginning of the compliance year in which the credits are generated. All RECs shall have a life of three compliance periods, after which the program administrator will retire them from the trading program.
- (4) Each REC that is not used in the year of its creation may be banked and is valid for the next two compliance years.

- (5) A competitive retailer may meet its renewable energy requirements for a compliance period with RECs issued in or prior to that compliance period which have not been retired.
- (n) **Registration and certification of renewable energy facilities.** The commission shall register and certify all renewable facilities that will produce either REC offsets or RECs for sale in the trading program. To be awarded RECs or REC offsets, a power generator must complete the registration process described in this subsection. The program administrator shall not award offsets or credits for energy produced by a power generator before it has been certified by the commission.
- (1) The designated representative of the generating facility shall file an application with the commission on a form approved by the commission for each renewable energy generation facility. At a minimum, the application shall include the location, owner, technology, and rated capacity of the facility and shall demonstrate that the facility meets the resource eligibility criteria in subsection (e) of this section.
- (2) No later than 30 days after the designated representative files the certification form with the commission, the commission shall inform both the program administrator and the designated representative whether the renewable facility has met the certification requirements. At that time, the commission shall either certify the renewable facility as eligible to receive either RECs or offsets, or describe any insufficiencies to be remedied. If the application is contested, the time for acting is extended by 30 days.

- (3) Upon receiving notice of certification of new facilities, the program administrator shall create an REC account for the designated representative of the renewable resource.
 - (4) The commission may make on-site visits to any certified unit of a renewable energy resource and may decertify any unit if it is not in compliance with the provisions of this subsection.
 - (5) A decertified renewable generator may not be awarded RECs. However, any RECs awarded by the program administrator and transferred to a competitive retailer prior to the decertification remain valid.
- (o) **Penalties and enforcement.** If by April 1 of the year following a compliance year it is determined that a competitive retailer with an allocated REC purchase requirement has insufficient credits to satisfy its allocation, the competitive retailer shall be subject to the administrative penalty provisions of PURA §15.023 as specified in this subsection.
- (1) Except as provided in paragraph (4) of this subsection, a penalty will be assessed for that portion of the deficient credits.
 - (2) The penalty shall be the lesser of \$50 per MWh or, upon presentation of suitable evidence of market value by the competitive retailer, 200% of the average market value of credits for that compliance period.
 - (3) There will be no obligation on the competitive retailer to purchase RECs for deficits, whether or not the deficit was within or was not within the competitive retailer's reasonable control, except as set forth in subsection (m)(2) of this section.

- (4) In the event that the commission determines that events beyond the reasonable control of a competitive retailer prevented it from meeting its REC requirement there will be no penalty assessed.
- (5) A party is responsible for conducting sufficient advance planning to acquire its allotment of RECs. Failure of the spot or short-term market to supply a party with the allocated number of RECs shall not constitute an event outside the competitive retailer's reasonable control. Events or circumstances that are outside of a party's reasonable control may include weather-related damage, mechanical failure, lack of transmission capacity or availability, strikes, lockouts, actions of a governmental authority that adversely effect the generation, transmission, or distribution of renewable energy from an eligible resource under contract to a purchaser.
- (p) **Renewable resources eligible for sale in the Texas wholesale and retail markets.** Any energy produced by a renewable resource may be bought and sold in the Texas wholesale market or to retail customers in Texas and marketed as renewable energy if it is generated from a resource that meets the definition in subsection (c)(14) of this section.
- (q) **Periodic review.** The commission shall periodically assess the effectiveness of the energy-based credits trading program in this section to maximize the energy output from the new capacity additions and ensure that the goal for renewable energy is achieved in the most economically-efficient manner. If the energy-based trading program is not effective,

performance standards will be designed to ensure that the cumulative installed renewable capacity in Texas meets the requirements of PURA §39.904.

This agency hereby certifies that the rule, as adopted, has been reviewed by legal counsel and found to be a valid exercise of the agency's legal authority. It is therefore ordered by the Public Utility Commission of Texas that rule §25.173 relating to Goal for Renewable Energy is hereby adopted with no changes to the text as proposed.

ISSUED IN AUSTIN, TEXAS ON THE 24th DAY OF APRIL 2000.

PUBLIC UTILITY COMMISSION OF TEXAS

Chairman Pat Wood, III

Commissioner Judy Walsh

Commissioner Brett A. Perlman