



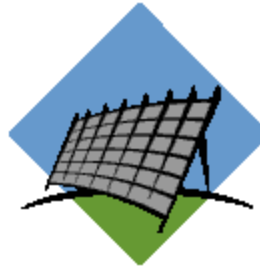
Renewable Energy Credit Trading Program

ERCOT 101: Understanding the Tools of the Texas Retail Market

November 2, 2010

- **What is a REC - Renewable Energy Credit**
- **What is a CP – Compliance Premium**
- **Creation of Renewable Energy Credit (REC) Trading Program**
- **Definition and Types of Renewable Energy**
- **Program Administrator**
- **Overview of REC Trading Program**
- **ERCOT Renewables Website**

- **A REC is a tradable instrument that represents (1) MWh of production from a certified renewable generator.**
- **A CP is a tradable instrument that represents (1) MWh of production from a certified renewable generator other than wind.**
 - To calculate MWhs and CPs to determine # of RECs:
 - Existing Generation (pre 2005) - 1 MWh of generated renewable energy = 1 REC = 1 CP
 - New Generation (Since 2005) – 1 MWh of generated renewable energy = 1 REC + 1 CP (equivalent to 2 RECs)
- **Each REC/CP is good for up to three compliance periods (two full years and the partial year in which it was created)**



Creation of REC Trading Program

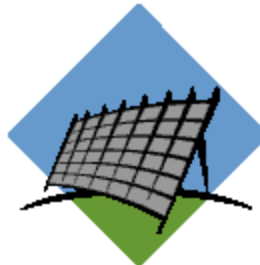
Result of Legislation in SB7 and Public Utility Commission of Texas (PUCT) – Substantive Rule 25.173, Goal for Renewable Energy and Amended by Senate Bill 20 of 2005

- Ensure an additional 5000 megawatts (MW) of new generating capacity from renewable energy technologies is installed in Texas by 2015, to be increased to a total of 10,000 by 2025
- Encourage the development, construction and operation of new renewable energy resources
- To protect and enhance the quality of the environment in Texas through increased use of renewable resources
- Ensure all customers have access to providers of energy generated by renewable energy resources
- If existing generation is removed, the MWh lost must be replaced with new generation

Year	MW Cumulative New Renewable Capacity
2003	1280
2005	1730
2007	2280
2009	3272
2011	4264
2013	5256
2015	5880
2025	10,000

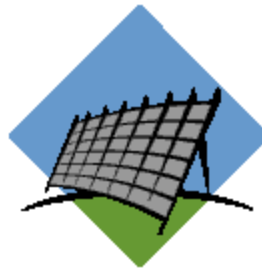
Renewable energy technology is any technology that:

- Exclusively relies on an energy source that is naturally regenerated over a short time and is
 - Derived directly or indirectly from the sun and generates electricity
 - Derived from natural movements and mechanisms of the environment



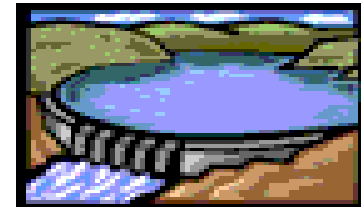
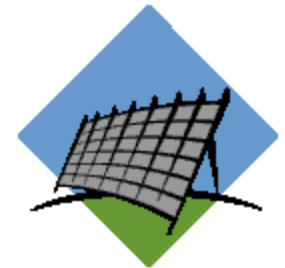
Renewable Energy Technology does not rely on:

- Energy resources derived from fossil fuels
- Waste products from fossil fuels
- Thermal solar energy (unless metered or accepted MMBTU Conversion Technology approved by PUCT)
- Waste products from inorganic sources



Renewable Energy Sources are:

- Wind Generators
- Solar Photo-Voltaic Panels
- Landfill Gas Capture/Utilization Devices
- Tidal Flow Energy Capture Devices
- Flowing Water Energy Capture Devices
- Dams
- Geothermal Energy Capture Devices



On May 9, 2000, (PUCT) appointed ERCOT as Program Administrator of the Renewable Energy Credits (REC) Trading Program

- Program Administrator Responsibilities:
 - Register Program Participants
 - Create and maintain REC/CP accounts/records
 - Determine annual REC requirement for Retail Entities
 - Distribute RECs/CPs to generators, quarterly
 - Verify Retail Entities meet annual REC requirements
 - Retire RECs/CPs as directed by program participants or as they expire

- Program Administrator Responsibilities continued:
 - Track MWh of renewable energy generated
 - Create unique REC IDs for each MWh
 - Maintain public information on its website
 - Provide monthly report of MWh load in Texas
 - Provide list of REC account holders with contact information
 - Provide list of Facility ID Numbers, and associated information
 - Provide reports to the PUCT – Compliance



- **Program Applies to:**

- Retail Entities

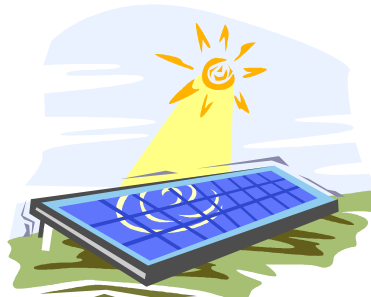
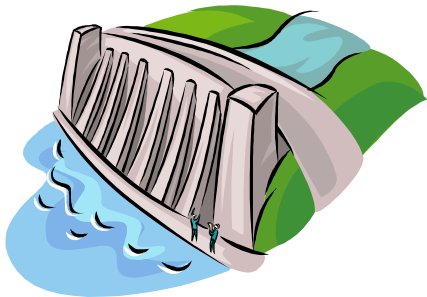
- Municipally Owned Utilities (MOU)
 - Generation and Transmission Cooperatives that offer Customer Choice
 - Retail Electric Providers (REPs)
 - Investor Owned Utilities that have unbundled pursuant to PURA Chapter 30



- **Texas-wide**

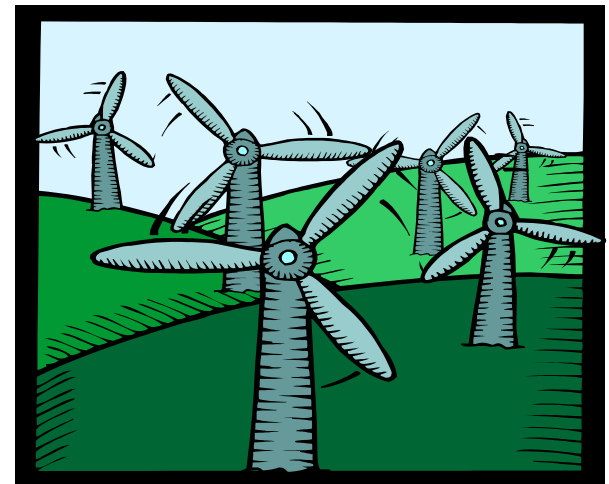
- **Requires submission of RECs/CPs annually for Compliance**

- **REC Program:**
 - Annual REC Compliance Requirement for REPs
 - REPs are required to submit RECs/CPs annually in proportion to retail load served in TX
- **PUC Labeling Initiative:**
 - RECs/CPs are for verification of advertising claims for green power

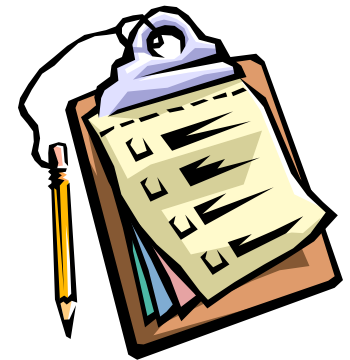


MP Responsibilities: Generators

- Apply to PUCT for certification as a REC generator
- Apply to ERCOT for REC account
- If not an ERCOT polled generator then the generator must enter monthly generation data in the ERCOT Web Site
- Generate & Sell Energy
 - Separate Energy from Credits
 - Two revenue streams for generators
- Receive and Sell RECs



- **Competitive Retail Electric Providers**
 - Apply to ERCOT for REC account after certification
 - Obtain annual REC Compliance Requirement from ERCOT by January 31st
 - Submit REC Compliance numbers to ERCOT by March 31st
 - If load is not ERCOT polled, then CR must enter load data in ERCOT web site
- **Other Entities**
 - No Restrictions on Participation
 - Apply to ERCOT for REC account



- **All data available online for 3 years**
- **No limits on REC Account Applications**
- **All Activities Available Online**
 - Account Registration
 - Trading
- **Secure Portal for REC Account Holders**
 - Enable Account Activities: View, sort, batch, or singly identify RECs to Transfer or Retire



Go to the ERCOT Website

- www.ercot.com
- Select View Other ERCOT Websites
- Select Renewable Energy Credits Program-
Texasrenewables.com
- Select Login (New Users will need to register.)

Some features do not require a login

Address: <http://www.texasrenewables.com>

ERCOT
THE TEXAS CONNECTION

Home E-mail Contact

Log-In

Register Now

Renewable Energy C...

- News Room
- Renewable Energy C...
- Message Board
- Related Links
 - PUCT
 - ERCOT

REC Utilization Program

- Market Participant Requirements
- Participant Training
- Frequently Asked Questions
- Public Reports

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ERCOT Renewables Program Home Page View

New Account
Registration
Form

New Account Application

Account Type: *

REC Generator REC Offset Generator
 Mixed Generator Competitive Retailer
 REC Broker REC Trader
 REC Trading Exchange REC Aggregator
 Other

DUNS Num: (0 - 13 alphanumeric)

Company Name:

Address:

City:

State: Texas

Country: USA

Phone Number: *

Fax Number:

E-mail: * (format: abc@eroot.com)

Web Site: (format: www.eroot.com)

Choose your Login Name and Password:

Login Name: *

Password: * (5 to 8 alphanumeric)

Confirm Password: *

Security Question:

Security Answer:

Provide the following information if you have selected the Competitive Retailer account type:

ERCOT Polls Unit: ** ERCOT Polls Meter Data
 Manual Data Entry. If checked, please enter a name below:
 Name of Metering Data Provider

ERCOT Designation: ** ERCOT Non-ERCOT

Texas Designation: ** Texas Non-Texas

* Required Field
** Required Field for the Competitive Retailer

[Privacy Policy](#)

Select Retail Entities

Account Holder Information for Competitive Retailer

Company Name ↑↓	Contact Name ↑↓	Email ↑↓	Web Site ↑↓	Phone ↑↓	Joined on ↑↓
Franklin Power Company	Roger McAulay	cechols@franklinpower.com	www.franklinpower.com	214-219-6060	3/5/2004
Liberty Power Corp.	Roshena Ham	roshena.ham@libertypowercorp.com		954-771-1463	3/2/2004
Texas Retail Energy	Chris Hendrix	chris.hendrix@wal-mart.com		479-204-0845	3/2/2004
Starlight Electric	Jill Riley	jill@starlightelectric.com	www.starlightelectric.com	817-548-0808	2/26/2004
IIM Energy of Texas, LLC	Julie Spoering	jspoering@nordicenergy.com	www.5pointpower.com	(972) 881-9955	2/24/2004
TXU ET Services Company	Rex Smothermon	Rex.Smothermon@TXU.com	www.TXU.com	214-875-9484	2/23/2004
USAVE ENERGY	CHARLIE OWENS	cindust1@tampabay.rr.com	www.usaveenergy.com	866-791-1833	2/20/2004
AmPro Energy, Inc.	Stephen Brownell	sbrownell@amproenergy.com	www.amproenergy.com	281-446-2520	2/20/2004
Spark Energy dba Firefly Powered by Spark	Michael Osowski	mosowski@sparkenergyfp.com	www.sparkenergyfp.com	713-977-5634	2/20/2004
Hino Electric Power Company	Alex Hinojosa, Jr.	hinojr@hinoelectric.com	www.hinoelectric.com	956 428 2800	2/20/2004
Mpower Energy Services	Brandon Schwertner	bschwertner@mpowerfp.com	www.seminoleenergy.com	832-200-5631 x750	2/18/2004
ACII Energy	Judy Sirut	jsirut@acninc.com	www.acnenergy.com	248 699-3270	2/11/2004
DE Multi-Family	Mark McMurray	mark.mcmurray@na.centrica.com	www.centrica.com	713-877-3661	1/21/2004 1:39:55 PM
Direct Energy Business Services	Mark McMurray	mark.mcmurray@na.centrica.com	www.centrica.com	713-877-3661	1/21/2004 1:39:55 PM
Nueces Electric Coop - CR	Wendy Ohrt	wendyo@stec.org	www.nueceselectric.org	361-485-6172	1/6/2004 1:44:04 PM
TriEagle Energy, L.P.	Marty Downey	mdowney@trieagleenergy.com	www.trieagleenergy.com	281-681-2381	5/9/2003 10:52:25 AM
BP Energy	Dana Bryant	Dana.Bryant@bp.com		281-366-4375	4/21/2003 2:11:31 PM
Andeler Corporation	Clayton Fowler	claytonfowler@andeler.com		806-535-2345	3/11/2003 9:28:11 AM
Tractebel Energy Services, Inc.	Ken MacMahon	kmacmahon@tractebelusa.com	www.tractebelenergy.com	713-350-1678	3/10/2003 4:34:23 PM
Just Energy Texas	Sean Holmes	sholmes@justenergy.com	www.justenergy.com	713-850-6793	3/7/2003 5:35:35 PM
Spark Energy, L.P.	Michael Osowski	mosowski@sparkenergyfp.com	www.sparkenergyfp.com	713-977-5634	3/5/2003 10:40:57 AM
Energy Gulf States TX	Barry Howell	lhowell@entergy.com		512-487-3980	2/22/2003 3:13:44 PM
Tara Energy, Inc.	Ileville Ravji	Ileville.Ravji@TaraEnergy.com	www.TaraEnergy.com	713 830 1019	12/17/2002 2:23:45 PM
Mutual Energy SWEPCO, LP	Lauri White	lwhite@aep.com		512-481-4540	12/9/2002 2:28:25 PM
Tractebel Energy Marketing Inc. (I SE)	Cesar Seymour	Cseymour@tractebelusa.com		713.985.3908	10/10/2002 1:40:49 PM

List of participating CR/REP Contact info

- Texas Legislative Website – SB 541 and 545
<http://www.capitol.state.tx.us>
- PUCT Website – Substantive Rule 25.173, Goal for Renewable Energy -
<http://www.puc.state.tx.us/rules/subrules/electric/25.173/25.173.pdf>
- ERCOT Protocols Section 14: State of Texas Renewable Energy Credit Trading Program –
<http://www.ercot.com/mktrules/protocols/current/14-081804.doc>

- **REC Program is Mandated by the PUCT and administered by ERCOT**
- **All CR/REPs serving load must participate**
- **All CR/REPs are responsible for their reported load**
- **Everything can be done from the ERCOT Renewables website**
- **Participation is optional for Generation Resources**

To be in compliance, how often are Competitive Retailers required to submit REC's?

For what entity-type is participation in the REC program voluntary?

