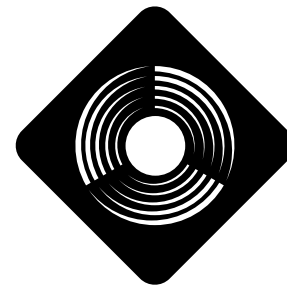


Renewable Energy and Your Electric Utility



RENEWABLE ENERGY
THE INFINITE POWER
OF TEXAS

SECO FACT SHEET **NO. 20**

HIGHLIGHTS

- ◆ **The Texas electric industry is changing**
- ◆ **Texas is becoming a leader in renewable energy development**
- ◆ **Customers will have many choices**

SUMMARY

Due to a new set of laws and rules changing how power is bought and sold in Texas, we are well on the way to a system of competitive and choice-driven electric companies, much like telephone service today, in which you can choose and change your supplier. Texas law now requires big private electric utilities, such as those in Dallas and Houston, to open their markets in 2002. Rural electric cooperatives and municipal utilities, such as those owned by Austin and San Antonio, are not required to open their market base to competition, but may choose to do so. The outcome will be more choices for more customers,



SOURCE: Lower Colorado River Authority

Clean, low cost electricity for Texas *Wind farms similar to this one in the west Texas mountains near Van Horn could become a major source of home-grown power in the future.*

including the ability to choose energy generated from the state's clean renewable energy resources like wind, solar and biomass power.

NEW RULES CATAPULT RENEWABLES

Renewable Portfolio Standard (RPS)
The law that defined the new electric structure for Texas requires that

all electric service providers sell a minimum amount of renewable energy. The law requires that 2,000 megawatts (MW) of new renewable generating capacity be installed by 2009 and added to the 880 MW already in Texas. This concept is called a "Renewable Portfolio Standard," and while Texas was only the 6th state to adopt such a rule, its RPS is shaping up to be the most effective one to date.



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| | | |
|----------------------------------|------------------|-------------------|
| Existing Capacity (1999): | | 880 MW |
| New Capacity Targets: | | |
| Deadline | Increment | Cum. Total |
| By 2003 | 400 MW | 1,280 MW |
| By 2005 | 450 MW | 1,730 MW |
| By 2007 | 550 MW | 2,280 MW |
| By 2009 | 600 MW | 2,880 MW |

Projected increases in new renewable energy power plants through 2009 *The Texas Renewable Portfolio Standard provides targets for installing new renewable power plants that will increase the state's total renewable generating capacity from 880 MW in 1999 to 2,880 MW by 2009.*

Renewable Energy Credits (RECs)

The cornerstone of the new Texas rules is the ingenious yet simple creation of a tradable certificate called a Renewable Energy Credit. Renewable energy generation projects certified in the state create one (1) REC per megawatt hour of electricity produced.

On an annual basis, every Retail Electric Provider (REP) selling electricity in the competitive areas of the state must show that it has purchased its share of the required renewable energy generation. That share will be determined by prorating the required benchmarks for renewable energy generating capacity based on the company's share of the electricity market. The REP will prove it is meeting its MW capacity benchmarks by the number of RECs it possesses.

The demand for RECs will result in the building of new renewable energy projects, thereby displacing electricity that would otherwise be generated from traditional resources. The kilowatt hour (kWh) of renewable electricity is not tied to the REC. Each may be sold separately. Claims of renewable energy use in Texas will depend solely on ownership of RECs and not where the commodity energy flows.

This market-based system has been extraordinary in stimulating the Texas renewable energy market. During 2001 as much renewable energy generating capacity is expected to come on-line in the state as

during the previous 100 years. That's quite a success story! And because of the large volume of new construction, renewable energy has become more affordable, leading to more opportunities for customers wanting cleaner electricity.

RENEWABLES FOR ELECTRIC CONSUMERS

It is important to understand just what energy resources are included in any "Green Power" product offered by an electricity marketer. In Texas, only a reference to the term "renewable energy" in such marketing is a reference to those resources

clearly defined as renewable in the electric utility restructuring law. This would include electricity generated from solar, wind, biomass, geothermal and hydro resources, and clearly excludes any fossil-based resources. Other power products using Texas natural gas resources can still be marketed as “green” due to the low emissions associated with natural gas power plants.

Some companies may specialize in selling 100% renewable power with reliability that is identical to what

customers enjoy today. Others may offer power with various percentages of renewable energy. In some cases they may offer renewable power contracts at fixed rates, while rates for conventional electricity rise and fall with fossil fuel prices.

It is exciting that Texas has become the nation’s best wholesale market for renewable energy, and it will be interesting to see how Texas customers respond at the retail level for cleaner electricity.

Texas Renewable Energy Generating Projects Announced in 2000

Approximate Subtotals by Technology

Wind = 650 MW
Biogas = 50 MW (landfills)
Hydro = +50 MW (renovations)
Solar = < 1 MW

Total = 750 MW (approx.)

Generators Respond to Incentives *During 2000, companies announced plans to construct an additional 750 MW of new renewable energy power plants in Texas.*

WHAT TO LOOK FOR IN THE ELECTRICITY YOU BUY

All retail electric providers will be required to disclose certain information enabling customers to make educated decisions about choosing among competing offers. Here are some important characteristics to consider:

- 1** Types of renewables
- 2** Content of new renewable energy
- 3** Emissions impact
- 4** Other factors important to you, such as fixed price, company contributions to environmental causes, use of union labor, etc.

ORGANIZATIONS

Public Utility Commission of Texas
(PUC) Consumer Assistance Hotline
(512) 936-7120 or (888) 782-8477
www.puc.state.tx.us

Environmental Defense
44 East Avenue, Suite 304
Austin, TX 78701
(512) 478-5161
www.environmentaldefense.org

Public Citizen of Texas
2812 Hemphill Park
Austin, TX 78705
(512) 477-1155
www.citizen.org/cmep/

Consumer's Union
1300 Guadalupe, Ste. 100
Austin, TX 78701
(512) 477-4431
www.consumersunion.org

RESOURCES

FREE TEXAS RENEWABLE ENERGY INFORMATION

For more information on how you can put Texas' abundant renewable energy resources to use in your home or business, visit our website at www.InfinitePower.org or call us at 1-800-531-5441 ext 31796. Ask about our free lesson plans and videos available to teachers and home schoolers.

ON THE WORLD WIDE WEB:

The **Green-e Renewable Electricity Certification Program** is a way for customers to easily identify "green" electricity products in order to encourage consumer confidence in buying "green" electricity. Green-e is the nation's first voluntary certification and verification program for "green" electricity products. www.green-e.org/

Good information on green power marketing and utility renewable energy programs.
www.eren.doe.gov/greenpower/home.shtml
www.eren.doe.gov/greenpower/summary.shtml

Information on almost 113,000 MW of renewable energy generation capacity connected to the utility grid, covering all renewable energy technologies. www.eren.doe.gov/repis/

The **Electric Reliability Council of Texas** answers questions specifically about renewable energy in Texas. Look for a link to www.TexasRenewables.com on their page.
www.ercot.com

The **Environmental Defense's** web site includes a beginner's guide to buying green electricity, a green product-by-product comparison chart, an interactive Electricity Label Generator that calculates the potential environmental impacts of electricity used, and other discussions on solar energy. www.environmentaldefense.org/programs/Energy/

The **Interstate Renewable Energy Council** offers here an excellent further listing of web sites addressing restructuring and renewable energy resources.
www.irecusa.org/restruct.htm

The **Environmental Protection Agency's Toxic Release Inventory** and the **Environmental Defense Fund's Scorecard** allow citizens to find what pollutants are in their communities, including those from electric generation, and the specific sources of those pollutants.
www.epa.gov/tri/
www.scorecard.org/

Renewable Energy Roundup and Sustainability Fair. An annual event in Texas that provides renewable energy booths, seminars and workshops.
www.RenewableEnergyRoundup.com



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STATE ENERGY CONSERVATION OFFICE
111 EAST 17TH STREET, ROOM 1114
AUSTIN, TEXAS 78774
PH. 800.531.5441 ext 31796
www.InfinitePower.org