



# West Texas Wind Wire



July 2007

## Global standard for Texas transmission grid

### PUC issues bold CREZ decision

The Lone Star State's long-awaited "CREZ" decision is out — with multi-billion implications for West Texas . . . and some mysteries still to be discovered.

The Public Utility Commission of Texas ("PUC") announced its designations July 20 for "competitive renewable energy zones" or "CREZ". The PUC action sets in motion major transmission upgrades to connect 8 designated West Texas wind energy generation zones to Texas metropolitan regions such as Houston, Dallas-Fort Worth, Austin, San Antonio, the I-35 corridor, and Corpus Christi.

The PUC action would direct transmission construction that could ramp up Texas wind energy operations by 10,000 to 25,000 MW.

For comparison, total USA wind energy generation was estimated at almost 12,000 MW by March 31, 2007. Roughly one-third of that is already provided by West Texas.

The magnitude of the PUC action would catapult West Texas ahead of Germany to be the world's leading wind energy generation nation.

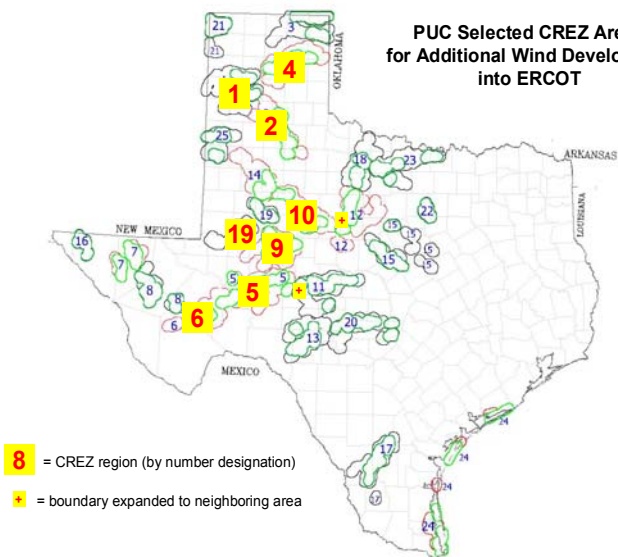
The formal written order is expected in early August. Certain designated zones are already scheduled to be expanded to take in neighboring counties.

It is anticipated that certain areas not designated as CREZ will lobby for

inclusion, and there is still some confusion about what it means to be outside of a CREZ — as well as to be a project within a zone but to have not participated in the PUC proceedings.

The map demonstrates that all CREZ designations are in West Texas in this first contested case. Other areas are under active development, including the Red River valley, South Plains, northern Panhandle, the Post Oak region, and South Texas.

25,000 MW of new wind could mean more than \$35 billion in investment in West Texas and thousands more high-paying energy and manufacturing jobs.



## FPL Energy plans 200-mile 'DFW Express' transmission

FPL Energy, the USA leader in wind energy, has announced plans to build a direct current ("DC") transmission from the Taylor-Nolan county area to Dallas-Fort Worth.

Lone Star Transmission, a subsidiary of FPL Energy LLC on May 31 filed an application with the Public Utility Commission of Texas ("PUC") to build the 180-200 mile

power corridor project.

FPL Energy calls the project the "DFW Express" and intends to construct, own, and operate the project through Lone Star to carry 2,000 MW from the Horse Hollow wind region to the Metroplex.

FPL Energy expects the line to be operational within three years of PUC approval.

Volume 3, Issue 4

July 2007

#### USA Wind Energy

- West Texas — 4 GW
- California — 2.5 GW
- Nolan County 1.6 GW
- Iowa — 932 MW
- Minnesota — 895 MW
- Washington state — 818 MW
- Horse Hollow — 760 MW
- McCamey — 760 MW
- Sweetwater Wind — 600 MW

#### Inside this issue:

**High Cotton:** 2  
**West Texas wind energy projects advance on farms & ranches**

**Panhandle mega projects on drawing boards** 3

**DeWind, TSTC bring test & training center to Sweetwater** 3

**"Ride the Wind" kicks off on Saturday, Oct. 6** 3

**Upcoming events** 3

**Congress considers national energy standard** 4

**Arkansas nets blade factory, 1000 jobs** 4



# IN HIGH COTTON

## Wind projects launch across West Texas

As West Texas races toward the 5,000 MW — or 5 gigawatt (GW) — threshold, projects are coming online and into focus throughout the vast region. Increasingly, cultivated farm land is as attractive to developers and ranch pasture land.

The expansion of large-scale wind development is a welcome arrival in farming communities — as it has been to West Texas ranchers — and communities throughout the region are celebrating the advent of new

from its nearest competitor. West Texas is on pace to double California in 2008, having matched the Golden State's pioneering stature only a year ago.

With the aggressive action of the Public Utility Commission (PUC) in the “competitive renewable energy zone” (CREZ) docket, is likely to outpace European leaders Germany and Spain within the next five years.



**GE wind 1.5 MW turbines at Invenergy's Camp Springs project southeast of Snyder rise above flourishing cotton fields.**

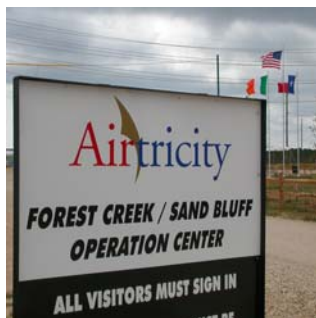
China is moving up rapidly as the massive nation turns its attention to wind energy. China currently has about 2,500 MW of operational wind energy — about equal to the combined total of Nolan, Taylor, and Scurry counties in West Texas.



**Vestas 3.0 MW turbines on 105-meter towers are now rising at the Snyder Wind Project.**

high-paying jobs, new schools, and the general revitalization of the region. Retention of families — and especially local high school and college graduates — is a central benefit of the industry's progress.

Across the Rolling Plains, the Permian Basin, and the Texas Panhandle, state-of-the-art wind projects are nearing commercial operation, adding to the Texas lead in the Western Hemisphere and distancing the state



**Airtricity recently dedicated the Forest Creek project south of Big Spring in Howard, Glasscock, and Sterling counties.**

Aggressive industrialization in India and China will leave those nations as the primary competitors to West Texas for global wind energy supremacy in coming years.



**Heavy-duty cranes hoist components of Mitsubishi 1.0 MW turbines into place in the fertile cotton fields of Nolan, Mitchell & Scurry counties in Airtricity's 209 MW Roscoe project.**

India has roughly 6,200 MW of operational wind energy as of mid 2007, up from about 5,000 MW a year ago.

Development pace in India is currently slower than in West Texas, but as the world's largest democracy, the Indian subcontinent has substantial upside potential.



**Roscoe — working through the Roscoe Wind Council — salutes Airtricity's investment in and around their community through the Roscoe and Champion wind projects with a billboard on Interstate 20 and other creative initiatives.**



**Siemens 2.3 MW generators tower above ranchland near Highland in Phase 4 of Babcock & Brown's Sweetwater project — second largest in the USA.**





# Panhandle mega projects announced

## *TXU, Shell aim for 3,000 MW*

TXU Corp. and Royal Dutch Shell have announced plans for a landmark project in Briscoe County on the Texas Caprock. Not only is the project pegged at 3,000 MW, but the two major corporations are committed to introducing compressed air storage into the wind center.

Compressed air storage — proven in large-scale operation by Ala-

**Shell & TXU have come together to launch a new era in wind energy efficiency.**

bama Electric Cooperative a decade ago — will enable the Briscoe County project to effectively create July electricity in April. When wind resources on the South Plains are strongest — such as spring and fall — metro Texas electricity demand (i.e., air conditioners) are not at their peak, but when Dallas and Houston temperatures and electric demand spike in summer, wind resources are typically low. Off-peak wind resources can be used to pump

air into storage caverns in spring and fall and released to meet peak metro demands months later.

Full development of the 3 gigawatt (GW) project depends on new transmission lines and CREZ outcomes. Shell estimates that the project would come on line in 2011 or 2012.

## *T. Boone Pickens calls for 4,000 MW project in Northeast Panhandle*

Mesa Power has announced plans for a 4,000 MW wind energy project across four Panhandle counties that would cost roughly \$6 billion to build. The oilman's bold vision would require roughly 2,000 large-scale turbines.

Pickens has been quoted extensively noting his observations that world oil production has peaked or is at the pivotal point.

The Mesa Power project would be centered in the Pampa area.

## **“Ride the Wind” bike event set for Oct. 6**

“Ride the Wind ‘07” will roll on Saturday, Oct. 6, marking the beginning of what will evolve into a multi-stage cycling event throughout the vast West Texas wind region.

This year's ride will cover 35 miles in Nolan County through some of the USA's leading wind energy projects and will raise funds for the Children's Miracle Network based at Abilene's Hendrick Medical Center.

Ride the Wind was developed by WTWEC intern Lindsey Turner, a senior at Sweetwater High School. For sponsorship opportunities and entry info, please contact Lindsey at 325-236-9499 or [texaswind@wtconnect.com](mailto:texaswind@wtconnect.com).

## **DeWind, TSTC, Sweetwater announce prototype testing, training center**

DeWind's new 2.0 MW turbine — manufactured in a strategic alliance with TECO-Westinghouse at their Round Rock, Texas, factory — will be prototyped in West Texas.

The prototype of the DeWind 8.2 will be a strategic alliance with Texas State Technical College-West Texas. The prototype will be an integral part of TSTC's wind energy technology degree program, continuing education for wind workers, and emergency response training.

In an example of the regional cooperation that is now prevalent in the Texas wind industry, the first large-scale turbine built by Texans will be erected near Highland High School, south of Interstate 20 at Roscoe, on land owned by the City of Sweetwater.

The Sweetwater Wind Energy Engineering Technology (SWEET) Center will feature additional full-scale prototypes to field test blades, gearboxes, and other systems, in addition to full turbine packages.

The Sweetwater complex will also feature a visitor center. The site is in the midst of almost 2,000 MW of wind energy capacity already operating or under active construction. Babcock & Brown's Sweetwater Wind Energy Center (approaching 600 MW) is to the immediate south, east, and west. Airtricity's 126 MW Champion project is to the immediate north and west of the site.

Within 30 miles of the site are several types of operational turbines, including GE Wind 1.5, Vestas 3.0, Siemens 2.3, Vestas 1.8, Gamesa 2.0, and Mitsubishi 1.0 MW.



### **Upcoming West Texas Wind Energy Consortium Events**

**August 1** — Wind Energy Conference — Amarillo — 9am - 5pm

**August 15** — TSTC Sweetwater — WTWEC luncheon — 12 noon

**August 21** — Garza County wind energy workshop — Post

**August 28** — Leadership Texas wind energy workshop — Abilene-Sweetwater

**September 5** — TSTC Sweetwater — WTWEC luncheon — 12 noon

**October 3** — TSTC Sweetwater — WTWEC luncheon — 12 noon

**November 8** — TSTC Sweetwater — WTWEC luncheon — 12 noon

**November 12-14** — Renewables '07 Conference — Abilene — Texas Renewable Energy Industries Association



July 2007



Representing America's  
energy independence region

119 East 3rd Street  
Suite 301  
Sweetwater, Texas 79556

Phone: 325-236-9499  
Fax: 325-235-2190  
E-mail: [TexasWind@wtconnect.com](mailto:TexasWind@wtconnect.com)  
[www.WestTexasWind.us](http://www.WestTexasWind.us)



.....  
*West Texas Wind Energy Consortium invites you to join in a new era of joint action to capitalize on the value of wind energy to West Texas.*

*Our region supplies roughly one-third of U.S. wind energy capacity, and only 3 foreign nations produce more wind energy than West Texas. This rapidly expanding industry provides substantial job creation potential and tax base growth for our region, and the outlook is strong into coming decades.*

*To facilitate a strong West Texas-wide effort to maximize our common economic benefits, leaders throughout the region have formed the West Texas Wind Energy Consortium across the breadth of West Texas, covering roughly 140,000 square miles from the Panhandle to the Rio Grande and Fort Worth to El Paso.*

**West Texas . . .**

**America's energy independence region.**



**West Texas Wind Energy Consortium interns from Roscoe, Highland, and Sweetwater high schools were among hundreds of West Texans attending WindPower '07 in Los Angeles in June. The major meeting of the American Wind Energy Association, this is the largest wind energy gathering in the world. WindPower '08 will be in Houston in June 2008.**



## Arkansas scores European blade factory

Arkansas now boasts 1,000 manufacturing jobs to go along with its one wind turbine.

Denmark-based LM Glasfiber on July 18 announced plans to open a new blade manufacturing facility in Little Rock. The plant is scheduled to begin operations in first quarter 2008 and will employ over 1,000 people within five years.

"We are very pleased to announce our new facility in Little Rock. The Little Rock plant is key to enabling us to serve our growing portfolio of customers in North America", says LM Glasfiber CEO Roland M. Sundén. "The facility will help secure our customers' long term blade supply thereby enabling their ambitious growth strategies while also increasing the robustness and visibility of LM Glasfiber's North American sales."

"We couldn't be happier with the location" adds Roland M. Sundén. "Not only is the site ideally located to serve some of the central US demand for wind development, but Arkansas was able to accommodate our aggressive ramp up schedule and we have every confidence they will exceed

our stated goals. The site itself offers excellent logistical options, whether by road, rail, air or marine. And when we considered the kind of amenities that are conducive for LM Glasfiber to attract and retain the people and talent we need, Little Rock was a natural choice for us." "LM Glasfiber adds another industry-leading company to Arkansas, and specifically to Little Rock," Governor Mike Beebe said. "Not only does LM Glasfiber offer a global presence, but it will supply skilled and technical

jobs to our citizens. LM Glasfiber also elevates Arkansas's presence among the growing state and national interest in the renewable energy industry. This development is another step forward for our state's economy in today's global marketplace."

The Little Rock plant will be LM Glasfiber's third North American production facility, joining factories in Grand Forks, North Dakota and Gaspé, Quebec.

## Congress targets national RPS

In early August, the U.S. House of Representatives is scheduled to take up the national renewable portfolio standard ("RPS"), which would be a major economic boon to communities, businesses, and industry throughout West Texas.

HR 969 would require utilities across the nation to generate or buy 20% of their electricity from renewable energy, including wind. The energy bill hits the House floor the first full

week of August.

States that oppose wind turbines would buy their renewable energy "credits" from wind-supportive states, such as Texas.

America's leading wind energy Congressional districts are in West Texas — including Rep. Randy Neugebauer (R-Lubbock) (#1 of 435) and Rep. Mike Conaway (R-Midland) (#3 of 435).

