

# The Oklahoma WinCharger

Sept/Oct. 2004 (A Newsletter for Oklahoma Wind Stakeholders) Vol. 4, #5



## Oklahoma Wind Power Initiative

A Collaborative Project by the  
University of Oklahoma and Oklahoma State  
University  
based at the

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## CO School Installing Wind Turbine

Wray School District will become the first school in Colorado to own and install its own wind turbine. These were the plans announced by the small school district in rural Yuma County in eastern Colorado. The turbine will be 1.5MW in size, and will provide enough power for the school, as well as have excess to provide power for the surrounding town. Valmont Industries of Valley, Nebraska is working together with the school district to install a prototype of their own self-erecting towers. Power production is expected to begin by spring or early next summer.

Funding for the \$1 million project cost has come from gifts and grants from multiple sources. Strong support for the project has been received from several of the state's politicians, including Governor Bill Owens (R), U.S. Senator Wayne Allard (R-CO), and retiring U.S. Senator Ben "Nighthorse" Campbell (R-CO). A joint letter from several of Colorado's Congressional Delegation, as well as environmental groups in the state also shared their support.

Once complete, it is hoped that the project will serve as a model for other communities to start community-owned wind projects. The project will provide economic, environmental, and educational benefits not just to the school district, but to the region and state as well.

*Editors Note: The above is a summary from AWEA's Wind Energy Weekly #1104.*

## Kaw Nation Install 20-m Tower

On July 13<sup>th</sup>, OWPI assisted the Kaw Nation with the installation of a 20-meter (66 ft.) wind resource monitoring tower. The tower and instrumentation were obtained from the U.S. DOE's National Renewable Energy Laboratory (NREL) as part of their Native American wind instrument loan program.

The tower was installed at the Pow Wow grounds for the Kaw Nation. For more information on NREL's Native American wind instrument loan program, contact Kylah McNabb at 405-447-8412 or [windgirl@ou.edu](mailto:windgirl@ou.edu).



*Above: The tower is laid out on the ground before being raised into position.*



Above: The group has a last discussion before raising the tower.

### **Report on Ownership Structures of Community Wind Projects Released**

The Energy Trust of Oregon released a new report on community wind power projects in the United States titled “A Comparative Analysis of Community Wind Power Development Options in Oregon.” Authors of the report included Mark Bolinger, Ryan Wiser, Tom Wind, Dan Juhl, and Robert Grace. Goals of the report included gaining a better understanding of the types of ownership structures that will be used for community wind projects in the Northwest, and types and levels of financial and non-financial support that may be required to make the projects possible.

The report includes experience and lessons learned from community wind power development in both Europe and the United States. On that basis, a number of financial, regulatory, technical, and market barriers to community wind projects are identified. The report then goes on to describe and model a number of different community wind development/financing/ownership structures that could possibly work in Oregon.

Though the heart of the financial analysis in the report is specific to Oregon, the bulk of the discussion is generic enough to be of use in other states. The full report, including an executive summary, can be downloaded at [http://www.energytrust.org/RR/wind/OR\\_Community\\_Wind\\_Report.pdf](http://www.energytrust.org/RR/wind/OR_Community_Wind_Report.pdf).

*Editor's Note: The above is a summary from AWEA's Wind Energy Weekly # 1106.*

### **OWPI Change of Address**

As of August 1, 2004, the mailing address for OWPI has changed. Please make a note of the following new suite number,

Oklahoma Wind Power Initiative  
Environmental Verification and Analysis Center  
University of Oklahoma  
3200 Marshall Avenue, **Suite 150**  
Norman, OK 73072-8032

Thank you and we apologize for any inconvenience.

### **Distribution of the WinCharger**

Electronic distribution of *The Oklahoma WinCharger* is available by signing up to be part of the ListServ mailing list. To sign up to receive your copy of the WinCharger by email, go to the OWPI website at [www.ocgi.okstate.edu/owpi](http://www.ocgi.okstate.edu/owpi), and click on the link on the left side that says, “Subscribe to the Oklahoma WinCharger” and follow the instructions from there. By receiving your copy of the WinCharger by email allows you to receive the newsletter faster, and helps us keep our mailing costs down.

If you have recently moved or changed your email, please let us know as well so we can ensure you receive your copy of the newsletter in a timely manner. Address corrections or updates can be sent to Mark Giesken, who can be reached at 405-447-8412, or by email [chsmlg@yahoo.com](mailto:chsmlg@yahoo.com). Thanks!

### **OWPI Receives Continued DOE Funding**

The Oklahoma Wind Power Initiative has been awarded continued funding from the U.S. Department of Energy's State Energy program to continue its work on education/outreach, policy study, and wind resource assessment. The funding, administered by the Oklahoma Department of Commerce (ODOC), will allow OWPI to continue educating the legislators, landowners, and the general public about wind energy issues. OWPI will also continue to install more instrumentation to help promote local investment in wind generation while at the same time continuing to refine and improve its wind resource models.

OWPI would like to thank the US DOE and ODOC for their continued support of our project.

## **Analysis Finds Economic and Environmental Potential of National 20% RES**

A recent study released by the Union of Concerned Scientists shows that a 20% renewable energy standard (RES) could provide economic savings for consumers with their electricity bills and create new jobs. The study finds that families and businesses could save \$35 billion on their electricity bills, and another \$14 billion on their natural gas bills with a 20% RES by the year 2020. The savings comes from reducing the demand, and in turn the price, of natural gas.

The study also finds that more than 355,000 jobs would be created with 20% of the nation's electricity coming from wind, solar, and other renewable energy sources. This is double the number of jobs created from generating the same amount of electricity from fossil fuels.

The analysis also found that a 20% RES would also benefit the U.S. economy in ways such as:

- A net gain of more than 157,000 new jobs in manufacturing, construction, operation, maintenance, and other industries
- \$73 billion in capital investment
- \$16 billion in income to farmers, ranchers, and rural landowners
- \$5 billion in property tax revenues for rural communities

The study also found that U.S. power plant carbon dioxide emissions, would also be 15% lower in 2025 with this 20% RES. A reduction in other pollutants such as nitrogen oxides, that produce smog and mercury would also take place.

A copy of Renewing America's Economy can be found on the web at: [http://www.ucsusa.org/clean\\_energy](http://www.ucsusa.org/clean_energy)

## **Markets for Wind REC's**

In this final article in the series exploring renewable energy certificates (REC's) and their role in the wind power industry, OWPI explores the markets that make REC's available.

There are currently two markets in the United States in which REC's can be sold. They are the *regulatory compliance market*, and the *voluntary market*.

*Regulatory compliance market:* A number of states in the U.S. have enacted legislation that requires that a certain percent of the electricity produced and delivered to retail electricity customers comes from renewable energy. This is known as a Renewable Portfolio Standard (RPS). Texas, New Mexico, and California are just a few of the states that currently have an RPS. In Texas and some other RPS states, it is possible for the electricity suppliers to comply with the RPS regulations by purchasing unbundled REC's from qualified renewable generators that are located in the state, or that deliver electricity into the regional power pool. Sales of REC's to meet RPS targets in Texas, Massachusetts and New Jersey were approximately 4.3 million MWh in 2003. This market will continue to grow as RPS targets are raised, and more unbundled REC's become available.

*Voluntary Market:* Corporations, governments, households, and other institutions are also buying REC's from wind generators. In this instance, it is not required that a certain amount of their electricity come from renewables, they buy REC's in an effort to reduce the environmental impact of their activities and in support of the growing renewable energy market. The voluntary market can be accessed by buyers in any state, and purchases can be made from a variety of sources. There are more than 20 retail REC marketers in the U.S. and around 1.2 million MWh of REC's were sold on this market in 2003.

OWPI hopes you now have a better understanding of what REC's are, and what role they play in the wind industry.

*Editors Note: The above is a summary of "REC's: Innovative Products for Wind Power Markets" by Craig Hansen and Vince Van Son in the May 2004 issue of North American Windpower.*

## Calendar of Coming Events

- Sept 22-23**    **27<sup>th</sup> World Energy Engineering Congress**, Austin Convention Center, Austin, TX. Contact Katrinka Maddox, 770-279-4388, [kat@aeecenter.org](mailto:kat@aeecenter.org) for more info.
- Oct 13**        Meeting of the **Oklahoma Renewable Energy Council**, 10 am to noon, OK Department of Commerce, Gallery 1-2. See [www.ocgi.okstate.edu/orec](http://www.ocgi.okstate.edu/orec) for more information.
- Oct 13-14**    **Wind Power Project Siting Workshop**, hosted by the American Wind Energy Association, Embassy Suites Portland Downtown, Portland, OR. Contact Stefanie Brown, 202-383-2500, [sbrown@awea.org](mailto:sbrown@awea.org) for more info.
- Oct 26-27**    The **Kansas Renewable Energy & Energy Efficiency Conference**, Topeka Capitol Plaza Hotel, Topeka, KS. See [www.ksrenew.com](http://www.ksrenew.com), or contact Jim Urich, 785-832-8866, [jimu@pinnacle.com](mailto:jimu@pinnacle.com).
- Nov 10**        Meeting of the **Oklahoma Renewable Energy Council**, 10 am to noon, OK Department of Commerce, Gallery 1-2. See [www.ocgi.okstate.edu/orec](http://www.ocgi.okstate.edu/orec) for more information.

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