

The Oklahoma WinCharger

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Oklahoma Wind Power Initiative

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Options for Stimulating Economic Development

"Renewable Portfolio Standards" and "Customer Choice" renewable energy marketing plans are options that have been adopted in other states to stimulate the development of wind farms and hence, economic development. Both options have been shown to work, but there is a difference in level and speed of effectiveness.

A **Renewable Portfolio Standards (RPS)** is a policy, usually adopted by a state government, that calls for retail suppliers of electricity to include some fixed percentage of their energy from renewable resources. Retailers that fall short of meeting this percentage pay a penalty according to their shortfall. These resources can often be from many technologies (wind, biomass, solar, geothermal, etc.) but wind power is usually the technology of choice in wind-rich areas due to its greater competitiveness. Because renewable resources take time to bring on line, the percentage starts low and is gradually increased over time until the target percentage is reached.

Many policy experts believe Texas has the best example of an effective RPS, to date. The Texas RPS, signed into law in 1999 by then Governor George W. Bush, requires 2,000 Megawatts (MW) of new renewable energy facilities by 2009 (2000 MW is enough power for about 350,000 homes). The first increment of 400 MW is due by the end of 2003. However, the momentum for wind farm development created by this policy has been so great that the state had installed nearly half of the 2000 MW requirement by late 2001. So far, this development has

represented a capitol investment of nearly \$1 billion, an estimated \$1.5 million in annual landowner lease payments, and millions of dollars in extra annual local tax revenues for Texas's rural communities.

Customer choice or "green marketing" opportunities are similarly aimed at stimulating a market for renewable energy. One opportunity includes utility-supplied green pricing options, where a utility will offer its customers the option to pay a premium such that a certain percentage of their monthly power use will be offset by purchase of renewable energy. Typical premium charges are on the order of a few dollars per month.

Customer-choice opportunities are commendable but have a low impact on driving up demand for wind power. Consequently, customer-choice may only stimulate the installation of a handful of wind turbines. Without investment in larger farms, economies of scale will not be realized for purchase, installation, operation, and maintenance of the turbines. In other words, it is more expensive per turbine to install and maintain a small number of them. This drives up the cost of wind energy per kilowatt-hour. Customer-choice is also a slower stimulant because it takes time to make customers aware of the option and to educate them as to why there will be long-term benefit to paying a little more for green power in the short-term.

In states with little or no short-term gain from wind farm development (that is, states with lesser wind resources), green marketing of wind power is often the only option that will be

acceptable to voters and rate-payers. It is understandably harder to convince the populace to accept a policy such as an RPS if it will require purchase of wind generated electricity from out-of-state, and with little or no economic gain to be had in-state. In that case, the customer-choice option is a good way to allow those especially concerned with the environment to make a contribution.

However, in states such as Texas and Oklahoma where all the required renewable energy can be provided by "locally-owned" wind, the RPS is the better option to really jump-start the rural economic development that wind farms can bring.

Side-Benefits to Wind Farm Development

Nordex AG, a German wind turbine manufacturer, and Vestas, a Danish manufacturer, are planning on building facilities in the United States. The following paragraphs were paraphrased from an article in the January Issue of Wind Power Monthly ("Montana Seeks Local Benefits" by Mike O'Bryant) and an article in the Oregonian Newspaper ("Danish wind turbine-maker looks at Portland for Plant", 01/09/02 Issue, Scott Learn).

Contingent on the approval of Nordex AG's board in Germany, Montana could have its first large wind farm, assembly plant, and maintenance center. A contract between Montana Power, Montana Wind Harness, and Nordex USA could bring the wind power into the state with a roar. Conditions of the contract call for Montana Power to purchase 150 MW of wind power from Montana Wind Harness for 3.165 cents/KWh. The wind turbines will be purchased from Nordex AG on the condition that they build an assembly plant and maintenance center within the state.

Montana Wind Harness plans to build the state's largest wind farm with 115 wind turbines on at least three different sites in the state according to Doug Barba, executive vice president of Armeresco Inc. of Framington, Mass., which is an investor in Montana Wind Harness. The project would represent an investment of \$120 million in Montana. Additionally, the two facilities would create up to 65 new jobs. Nordex USA's Robert Paul says there is a strong possibility Nordex will build the assembly plant. Mr. Paul says as much as 2000 MW of new wind generation is expected in the next few years in the Northwest and a plant in Montana could meet a clear need.

Following Montana's example, Oregon is attempting to bring a major wind turbine

manufacturer to the state. On January 8th, Mayor Vera Katz of Portland, OR announced in a council work session that a renewable energy company had Portland high on its list for a plant that could provide as many as 700 jobs. Sources said the company is Vestas Wind Systems of Denmark, which said it was considering building a North American plant in an interim financial statement issued in August of 2001.

Vestas' turbines are currently being used for the Stateline Wind Project at the Oregon-Washington border near Walla Walla, the Northwest's largest wind project. North American projects such as Stateline headed Vestas' breakneck sales growth in 2001. However, the expiration of the federal wind energy production tax credit (December 31st, 2001) prompted Deutsche Bank and several stock analysts to downgrade Vestas' stock, citing potential delays in North American sales. Mayor Katz warned that the deal could fall through if Congress doesn't extend the wind energy production tax credit.

Editor's Note: Both Oregon and Montana have a system benefit charge (SBC). A system benefit charge is a small charge added to a consumer's electric bill. Money from this charge is put into a fund that can be used to promote research and educational outreach about renewable energy and provide other technological benefits to the system.

The SBC legislation does not fund the construction of wind energy facilities, but it can stimulate a favorable environment for such projects. The most important point to take away from this experience in Oregon, Montana, and other states like Minnesota, is that wind power development can also spark opportunities in manufacturing and technology development for the state's citizens.

Panhandle Region Wind Energy Conference

An educational conference on wind energy is scheduled to take place Thursday, March 21st in the Oklahoma panhandle city of Guymon. The conference is sponsored by the Panhandle Regional Economic Development Coalition, Inc. (PREDCI), and by Xcel Energy. Professional people with the electric utility will be present, including Patrick Rendon from the Guymon office of Xcel Energy. Part of the day's activities will include a presentation by Tim Hughes, Project Director of the Oklahoma Wind Power Initiative and President of the Oklahoma Renewable Energy Council.

Another major speaker scheduled is Steve Jones, an energy supply specialist from Xcel Energy's home office in Minneapolis, Minnesota.

"Rural landowners, especially in the Oklahoma, Texas and Kansas panhandle region and other interested people are encouraged to attend the conference," says Sam Cartwright, executive director of PREDCI. He added that, "this gathering of experts gives us a chance to hear first-hand about this form of renewable energy without having to travel too far to learn more about the process."

The conference is scheduled to begin at 8:30 a.m. at the Texas County Activity Center and wrap-up by 3 p.m. The registration fee of \$20 includes lunch. To register, contact PREDCI at predci@ptsi.net or call 580-338-8500.

Regional BioEnergy Workshop in El Reno

In response to increased requests for bioenergy information, the National Association of Conservation Districts in partnership with the National Association of Resource Conservation and Development Councils are working with the US Department of Energy and the US Department of Agriculture. This group will present a series of workshops to be held in four states on bioenergy for state and local agricultural and conservation communities.

The Regional BioEnergy Workshop scheduled for Oklahoma will be on March 12, 2002 at the Redlands Community College in El Reno, OK. The one-day conference will begin at 9:00 a.m. and conclude by 4:00 p.m. Topics for discussion and presentation include:

- Bioenergy policy
- Benefits of bioenergy
- Biomass conversion to electricity
- Methane capture and ethanol

Each of these presentations will include science, technology fundamentals, feedstocks and trends. Questions such as "What does it take to begin a bioenergy operation" and other marketing questions will be addressed during the workshop. "Opportunities and next steps" will be explored at the conclusion of the day's presentations. For additional information, call 580-832-3661 or email larry.wright@ok.usda.gov.

OWPI to display at State Capitol GIS Day

The State GIS Council is holding its 8th Annual GIS Day at the Capitol on Tuesday, March 12, 2002 from 9:00 a.m. to 3:00 p.m. in the second floor rotunda of the State Capitol Building. The Oklahoma Wind Power Initiative will display posters, a GIS Wind Resource "toolkit" (computer software for geospatial analysis of wind resource and terrain features), its web site, and other products it has developed over the past 18 months.

April 11th Conference Web Site Ready

A web site is now available for interested folks to learn about the "**Wind Power and Bioenergy: Oklahoma Crops of the 21st Century**" conference. This conference will be held on April 11th at the Myriad Convention Center in downtown Oklahoma City. It will feature informative talks on wind power and bioenergy related issues and prospects for economic development through these emerging technologies. A tutorial workshop on wind power is also offered on April 10th (1:30 to 4:00 p.m.) for the beginner to learn the basics about wind energy.

The conference web site can be found at www.conferencepros.com/conferences/windpower. For those without access to the web, please call the National Conference Logistics Center at 405-325-3760 for more information and/or to request a registration form and brochure. If you are currently in the WinCharger's database, you will automatically receive the brochure.

The registration web site will be active by mid-February, so you can also register online soon. Please see the March WinCharger for much more information on conference speakers, exhibitors, topics, and more.

Reminder: E-mail Distribution of WinCharger

If you have email and access to the web, the WinCharger staff would like to put you on our electronic mailing list for future sharing of WinCharger issues. If you do have email, please send that to Kylah Kissinger, keeper of the WinCharger database, at windgirl@ou.edu. Thank you for helping us keep our mailing costs down.

Calendar of Coming Events

- Feb. 13** Meeting of the **Oklahoma Renewable Energy Council**, 10 to 11:30 a.m., State Capitol, Room 108.
- Mar. 12** **8th Annual GIS Day at the Capitol**, 9 a.m. to 3 p.m., second floor rotunda of the State Capitol Building. Hosted by the State GIS Council (see inside this issue for news about the Oklahoma Wind Power Initiative's display at this event)
- Mar. 12** **Regional BioEnergy Workshop**, Redlands Community College, El Reno, 9 a.m. to 4:00 p.m. See inside issue for more information.
- Mar. 13** Meeting of the **Oklahoma Renewable Energy Council**, 10 a.m. to noon, location TBA (see later issues or www.seic.okstate.edu/orec for updates)
- Mar. 21** **Panhandle Region Wind Energy Conference**, 8:30 a.m. to 3 p.m., Texas Co. Activity Ctr. See inside issue for more information.
- Apr. 10** **Wind Power Tutorial Workshop**, 1:30 to 4:00 p.m., Myriad Convention Center, Oklahoma City. See inside issue for more information.
- Apr. 11** **"Wind Power and Bioenergy: Oklahoma Crops of the 21st Century"** Conference, 8 a.m. - 5 p.m., Myriad Convention Center, Oklahoma City. See inside issue for more info, or visit www.conferencepros.com/conferences/windpower .

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