

The Oklahoma WinCharger

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Oklahoma Wind Power Initiative

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Production Tax Credit Extension Proposed

A bill proposing to extend the Production Tax Credit (PTC) another five years (through 2010) was recently introduced by Senators Byron Dorgan (D-ND) and Gordon Smith (R-OR). The current PTC program (set to expire at the end of 2005) provides a 1.8 ¢/kwh credit for facilities that generate electricity via renewable resources such as geothermal, solar, biomass and wind. Smaller credits are also provided for power production from open-loop biomass, small irrigation operations, and certain municipal solid waste programs.

Additional provisions of the proposed extension include incentive programs for development of renewable resources and opening participation to tax-exempt rural cooperatives and municipal and tribal based utilities. In addition to Representatives Dorgan and Smith, original co-sponsors of the PTC program include Senators Cantwell (D-WA), Harkin, (D-IA), Johnson (D-SD) and Murray (D-WA).

For additional information see:
Senate Committee on Energy and Resources
<http://energy.senate.gov/>.

Editor's Note: The above is a summary from AWEA's Wind Energy Weekly #1133.

Blue Canyon Wind Farm Expanding

On March 2, 2005, the Oklahoma Corporation Commission approved the purchase of 120 MW of wind-generated electricity by Public Service Company of Oklahoma (PSO) from Zilkha Renewable Energy's Blue Canyon Phase II project. Blue Canyon Phase II will be able to generate enough power for 34,000 Oklahoma homes.

“With this agreement, PSO continues to diversify its energy portfolio and solidify our position as the largest purchaser of wind energy in the state,” said PSO President Stuart Solomon. “Also, it allows us to provide our customers with the environmental benefits of clean, renewable energy while not raising PSO customers' rates.”

Construction on the project is expected to begin in late spring of 2005, and the project is expected to be operational by the end of 2005. AEP-PSO also announced a second purchase of 31.5 MW of wind-generated electricity on March 9th. This would bring the total purchase of wind-generated power from Blue Canyon Phase II to 151.5 MW.

AEP-PSO is scheduled to receive a total of 258 MW of wind-generated electricity as part of their electricity generation by the end of 2005. That is enough power for 73,000 Oklahoma homes. This includes 106.5 MW from the Weatherford Wind Energy Center, which is scheduled to be producing electricity by the end of April 2005 and the recent

151.5 MW purchase of electricity from Blue Canyon Phase II.

Aerisyn to Begin Tower Production in June

Aerisyn LLC, a Chattanooga, Tennessee based wind turbine and tower manufacturing company, has announced that production of tower structures is slated to begin at their facility this June. Aerisyn recently invested more than \$7 million in capital equipment to set up the new manufacturing line, which is expected to employ at least 75 people with hopes of doubling the workforce within 3 years. Aerisyn's new facility is more than 150,000 square feet and is projected to produce at least 200 tower units during its initial year of production.

Most of the towers will be 200 to 300 feet in height with diameters up to 15 feet at the base. A key element to the selection of the Chattanooga location was the barge port on the Tennessee River with access to the Mississippi River system and thus to offshore and international clients.

Editor's Note: The above is a summary from AWEA's Wind Energy Weekly #1129.

SD Passes Pro-Windfarm Legislation

This March the Governor of South Dakota signed into law a sweeping bill aimed at modernizing state statutes and clarifying regulatory oversight of the state's utilities commission. In addition to promoting wind farm development in general in South Dakota, the law clarifies utility commission authority regarding wind farm permitting and siting, and outlines certain financial and liability protections for landowners after sites are decommissioned.

The previous regulations in South Dakota had been in place since the 1970s and focused on fossil fuel plants and conversion facilities in excess of 100 MW. With many of the issues related to smaller wind farm operations unaddressed, utility commissioners and wind energy proponents were concerned that the lack of clear regulatory policy could lead to legal and bureaucratic delays and costs that might impede

wind farm development and send developers and investors to look elsewhere.

The new legislation aims to shorten the application process to six months, gives the utility commission authority to require bonds and insurance to fund removals and decommissioning, and better protects landowners. The legislation is meant to provide a wind power-friendly environment in the state and to create interest in potential operations of all sizes, especially on farmsteads and with rural smaller utilities companies and cooperatives.

Editor's Note: The above is a summary from AWEA's Wind Energy Weekly #1133.

WFEC Wins National Award

Western Farmers Electric Cooperative (WFEC) was named the national Wind Power Cooperative of the Year for 2004 at the 2005 annual meeting of the National Rural Electric Cooperative Association in March. WFEC, based in Anadarko, was singled out by the US Department of Energy as a leader among rural electric cooperatives in its support and expansion of wind power and transmission. WFEC was the first provider in the state to formalize a purchase power agreement with a wind power generator – Blue Canyon, LLC – for a wind farm north of Lawton. The Blue Canyon Facility generates 74.25 MW to Oklahoma Electrical Cooperative and 18 other rural cooperatives in the state.

National Renewable Standard Proposed

Vigorous efforts to include federally mandated renewable energy provisions in a national energy policy were unsuccessful, having failed to reach a final senate vote last year. In response to the impasse, those in favor of the proposal – known as the Renewable Portfolio Standard (RPS) – held a hearing of the Senate Energy and Natural Resources Committee. Those at the hearing lobbied for additional interest and attempted to reach cooperative agreements with opponents that failed to show support for the bill.

Among those expressing support for the Renewable Portfolio Standard are representatives of Pacificorp and the Union of Concerned Scientists, while those against the proposal include the DOE Assistant Secretary for Energy Efficiency David Garman, and representatives of Excel Energy and Southern

Company. An RPS generally requires retail electrical producers to obtain at least 10% of their electricity from renewable sources such as geothermal, solar, or wind power. Some opponents are not against an RPS outright, but rather wish to see the provisions include 'clean alternatives' such as coal gasification, clean coal, nuclear power, and efficiency and conservation credits.

Editor's Note: The above is a summary from AWEA's Wind Energy Weekly #1133.

FERC Proposes Rules for Wind Interconnections

On January 19, 2005 the Federal Energy Regulatory Commission (FERC) announced proposed rules aimed at standardizing a variety of industry-wide and national wind power generation and interconnection standards. Specifically, the proposed rulemaking would require wind plants to demonstrate low voltage ride through capabilities and have "supervisory control and data acquisition" (SCADA) ensuring real-time monitoring with transmission providers. These technical requirements are in response to FERC recognition of the need for standards and policies specific to wind power and call for recommendations from the wind industry and associated interests. The American Wind Energy Association (AWEA) formally submitted a variety of recommendations, known as the "grid code", in May of 2004, expressing collective input on the technical aspects of how wind-generating plants should be managed, integrated, and regulated. Details of the grid code can be found on the AWEA website at www.awea.org/policy/gridcode.html.

Interest in the proposed rules is heightened by a concurrent North American Electric Reliability Council (NAERC) review of interconnection issues and AWEA's promotion of uniform wind industry standards and specifications to stabilize interconnection and grid integration and technical performance capabilities. In addition to integrating wind-generated energy into the national power grid and improving and maintaining the reliability and compatibility of interconnections, AWEA notes the importance of providing a stable business and engineering

environment for equipment manufacturers and installation contractors.

The rules as proposed will apply only to wind farms larger than 20 MW, and will not apply to projects that have interconnection agreements in place. The proposed rules and formal FERC requests for industry input have again prompted AWEA to coordinate and collect responses for submittal to FERC during the 30-day public comment period, subsequent to Federal Register publication. FERC will then consider the comments and issue a final order. Upon promulgation of the final order, new projects that seek interconnection agreements will be subject to the FERC standards.

Editor's note: The above is a summary of AWEA's Wind Energy Weekly #1127.

European Wind Power Increased 20% in 2004

Annual wind power statistics for 2004 indicate that total wind power capacity for the European Union (EU) was up 20% to 34,205 MW and has averaged an annual growth rate of 22% since 1999. The European Wind Energy Association (EWEA) also reported that 5703 MW of new wind power capacity came on line in 2004, representing the integration of 7.3 billion US dollars (€ 5.7 billion) of turbine equipment. The 34,205 MW that was online by the end of 2004 is projected to have generated 73 trillion kWh of electricity last year.

The following are the top 5 wind energy capacity increases in 2004 by country:

- Spain - 2065 MW
- Germany - 2037 MW
- United Kingdom - 240 MW
- Portugal - 224 MW
- Italy - 221 MW

The Kyoto Climate Change treaty spurs European wind energy development. However, development is hindered by issues that are similar to those in North America, mainly those related to grid access and administrative integration issues.

Editor's Note: The above is a summary from AWEA's Wind Energy Weekly #1128.

FAA Moves on Lighting Layout of Wind Farms

The Federal Aviation Administration (FAA) has recently developed a new set of recommendations for lighting wind farms, which will require fewer lights. The new recommendations call for red or white synchronized flashing strobe lights, one half-mile apart at most, around the perimeter of the wind farm. "What we're trying to do is label the entire wind farm as one large obstruction, not something pilots should try to go between," said Jim Patterson at the FAA's William J. Hughes Technical Center in Atlantic City, N.J.

The FAA determines the warning light requirements for any structure that is over 200 feet in height. Based on aerial footage of some wind projects in Texas, the American Wind Energy Association (AWEA) and the Department of Energy (DOE) met with the FAA, and DOE offered to fund an FAA study to determine the most effective and efficient lighting techniques for wind projects. Four sites were originally surveyed, and then the project was expanded to include seven more. All projects were evaluated from the air to determine what lights in which configuration were the most visible for aircraft pilots.

Zilkha Renewable Energy's Wayne Walker volunteered Oklahoma's own Blue Canyon Wind Farm in Lawton for the study. "We are proud to be involved in a successful partnership with the FAA to create a lighting plan that is beneficial to the wind industry, local residents, and air traffic safety. We hope that this partnership model can be replicated in other siting issues the wind industry is currently addressing," said Walker.

Draft recommendations are required to be published in the Federal Register, and public comments are to be collected with a revised Advisory Circular later published. This process could take a few months, but the final report by Jim Patterson will be released publicly by the FAA's technical center as a Technical Note in a few months.

Editor's Note: The above is a summary from AWEA's Wind Energy Weekly #1129.

Governors Task Force Aims to Develop Clean Energy

The Western Governors Association (WGA) announced the formation of a Clean Energy Committee to meet a goal of creating new sources for producing 30,000 MW of clean and renewable energy in its member states by 2015. Various task forces of the committee are made up of governmental representatives, participants from national laboratories, representatives from industry associations, and individuals from various private energy-related corporations.

The task forces are charged with the development and promotion of various clean and renewable energy sources such as efficiency engineering, solar power, geothermal energy, biomass conversion, clean coal, advanced natural gas, and wind power, with a secondary emphasis in establishing modernized regional and interstate transmission capacities. The Wind Task Force will address a number of issues in addition to transmission topics including the design of energy supply curve models that incorporate the latest in wind climatology, energy production and usage forecasts, and price and market projections.

The Wind Task Force plans to place special emphasis on the needs and concerns that currently impede western wind power development, primarily accessibility to existing transmission lines and the development of transmission infrastructure in rural (and often wind-rich) areas.

For additional information on the Western Governors Association and their initiatives, visit: <http://www.westgov.org>.

Editor's Note: The above is a summary from AWEA's Wind Energy Weekly #1131.

Community Wind Farm Proposed in Colorado

Quixote Wind, Inc., a new company formed to pursue wind generation projects, has partnered with PPM Energy and various entities of the Boulder, Colorado community, including the City of Boulder and Boulder Community Hospital. Quixote plans to develop a 20 MW project in Southeastern Colorado that would generate electricity while complying with and supporting various energy conservation and environmental preservation attitudes and initiatives.

The City of Boulder has been engaged in attempts to reduce greenhouse gases within the city in compliance with Kyoto Protocol, even though the United States did not sign the international climate change treaty. Developing Colorado's wind-rich Eastern Plains provides jobs and income within the state and increases overall quality of life.

Editor's Note: The above is a summary from AWEA's Wind Energy Weekly #1129.

PA Announces Incentives for Clean Energy Companies

The Pennsylvania Department of Environmental Protection has embarked on an incentive-laden promotional effort to develop and recruit "advanced energy business" in the state. The state has designed numerous new financial incentives and policy mandates to encourage manufacturing relocations and expansions as well as energy development projects. The program is also interested in fostering long-term agreements within the commonwealth that encourage low cost, reliable, and clean energy from indigenous Pennsylvania sources, chiefly clean coal technologies. However, the program includes numerous other clean and renewable sources such as wind power.

Among the incentives are tax-exempt bonds, capital support of energy efficiency and clean energy projects, grants for renewable energy projects in the agricultural sector, advanced energy projects, and small-scale renewable energy generation facilities. The renewable energy projects are due to the recent adoption of policies and financial programs that require 8% of state electricity sold at retail to come from renewable sources. They also seek to highlight the potential for economically advantageous long-term partnerships with existing industries and to recruit new development and relocation from industry outside Pennsylvania.

Editor's Note: The above is a summary from AWEA's Wind Energy Weekly #1131.

MN University Constructs Turbine

The University of Minnesota West Central Research and Outreach Center (WCROC) will commission their recently built 230-foot wind

turbine during a ceremony on Earth Day, April 22nd. The turbine is located at the new Renewable Energy Research and Demonstration Center.

The turbine will be the foundation of a wind-to-hydrogen research project and is expected to provide 5.6 million kWh of electricity each year to the University of Minnesota-Morris campus nearby. That will equal close to half of the university's electricity use. "Our goal is to establish systems research to stimulate the renewable energy industry and provide a model for rural communities and agricultural producers to integrate renewable energy systems into their economies," said Greg Cuomo, head of WCROC.

The University of Minnesota Renewable Energy Research and Demonstration Center is designed to be a community-scale project. The goal is to combine research and demonstrations in wind, biomass, biofuels, anaerobic digestion, and renewable hydrogen with the local use and production of renewable energy. Other projects currently under development include a biomass district heating and cooling system for UMM, a hybrid wind and biodiesel energy system, an energy smart solar building addition to the WCROC office complex, and facilitation of a community anaerobic digester and methane pipeline system.

Editor's Note: The above is a summary from AWEA's Wind Energy Weekly #1134.

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 e-mail, go to the OWPI website at www.ocgi.okstate.edu/owpi, click on the link on the left side that says "Subscribe to the Oklahoma WinCharger," and follow the instructions from there. Receiving your copy of the WinCharger by e-mail allows you to receive the newsletter faster and helps us keep our mailing costs down.

If you have recently moved or changed your e-mail address, please let us know. Address corrections or updates can be sent to Mark Giesken at chsmlg@yahoo.com or by phone at 405-447-8412. Thanks!

Calendar of Coming Events

- Apr 7-8** **Tribal Energy-Southwest.** Las Vegas, NV. Contact registrar@lawseminars.com, or 800-854-8009 for more information.
- Apr 8** **2005 Oklahoma Sustainability Network Conference.** Wes Watkins Center, Oklahoma State University, Stillwater, OK. For more information, visit <http://www.oksustainability.org/conferences.htm> or contact Amber Magdaleno at (405) 702-5175, or via email: amber.magdaleno@deq.state.ok.us.
- Apr 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 for more information.
- Apr 28-29** **Western Region Governor's Conference on Agriculture & Economic Growth.** Frisco Conference Center, Clinton, OK. See www.oda.state.ok.us, or call (405) 522-5489 for more information.
- May 5-6** **Eastern Region Governor's Conference on Agriculture & Economic Growth.** NSU Conference Center, Muskogee, OK. See www.oda.state.ok.us, or call (405) 522-5489 for more information.
- May 11** Meeting of the **Oklahoma Renewable Energy Council**, 10 am to noon, OK Department of Commerce, Gallery 1-2. See www.ocgi.okstate.edu/orec for more information.
- May 15-18** **Windpower 2005 Conference and Exhibition.** Sponsored by AWEA, Denver, CO. Visit www.awea.org/wp05.html for more information.
- Sept 27** **Emerging Energy Technologies Conference.** Hosted by the Oklahoma Renewable Energy Council. National Center for Employee Development, Norman, OK. More information coming soon!

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