LANDOWNER news

IBERDROLA® RENEWABLES

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Ohio's Blue Creek Wind Farm Nearing Completion

In one of the most wind-rich areas in Ohio, the Blue Creek Wind Farm is sprouting from farmers' fields and nearly ready to generate clean, homegrown electricity. Iberdrola Renewables has developed and will own and operate the wind farm, which is scheduled to begin commercial operation early this year.

Since the Ohio legislature passed a new law in 2010 that made Ohio's property tax structure for wind farms much more competitive with neighboring states, Iberdrola Renewables was the first company to begin construction in a state that had no modern, utility-scale wind projects. When complete, it will be the largest single-stage project in Iberdrola Renewables' U.S. wind fleet of some 50 projects.

Located on 27,000 acres of privately owned land in Van Wert and Paulding counties, the project's 152 wind turbines will make enough electricity each year to power approximately 76,000 homes. Even though the turbines are some of the tallest in the country, at 476 feet to the blade tip, their average footprint encompasses only three-fourths of an acre, which includes the access roads.

Ohio and the surrounding communities have already felt the project's economic development impact, and Blue Creek will continue to be a positive force for years to come. The project results in a massive new source of revenue for county and township government, local school districts and other local taxing bodies. About 75 percent of Blue Creek's turbines are in Van Wert County, resulting in the project becoming the largest single taxpayer in the county by a wide margin; equal to the top 14 taxpayers combined. It also brings approximately $2 million in annual lease payments to local landowners, 15 to 20 new permanent jobs, and has peaked at over 500 workers on-site during construction. More than 50 percent of all the workers during construction are from Ohio, and more than 20 suppliers and sub-contractors, from hardware to portable toilets, are Ohio-based companies.

In what is largely corn and soybean country, the homegrown wind power will be another crop from the fertile farm lands of northwestern Ohio, blowing all year long and providing for generations.

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U.S. Energy Policy Brings About Changes at Iberdrola Renewables

With nearly 47,000 megawatts of clean, homegrown wind power now installed across the U.S., the wind energy industry has proven that it can power local economies and create new jobs. Through the past few years, the industry has leveraged billions of dollars in private investment, supported thousands of manufacturing jobs and put money in the pockets of farmers, ranchers and communities from coast to coast. However, energy has historically been a cyclical business, and as the winds have shifted to a downside of the cycle, we and our peers now face some significant challenges.

With a slow economic recovery driving low growth in demand for electricity, and with renewable energy companies anticipating an expiration of the federal renewable energy Production Tax Credit (PTC) – the primary federal support mechanism for wind and biomass energy in the U.S. – many businesses are scaling back, and we are not immune to those forces. The PTC has been in existence for 20 years, with legislation passed to extend it more than a half-dozen times. Predictably, when Congress has delayed its extension, investment in new wind generation has declined precipitously. With the credit due to expire and gridlock in Congress, the pattern will continue. As the regulatory environment in the U.S. becomes less certain, we have to make difficult decisions on where to allocate capital so we are scaling back in the U.S.

Iberdrola Renewables is a strong company with a solid balance sheet, positive cash flow and no real debt, so we are here for the long-term. In the last three years, we invested some $6 billion in U.S. wind and solar projects. This massive investment came during one of the sharpest economic downturns in U.S. history – when the construction and other jobs connected to our projects were needed most. In 2012, we are focusing on operating our fleet of some 5,000 megawatts of wind projects, rather than new building. We'll continue to engage in industry-leading practices in grid integration, wildlife protection and safety. Moving forward, development will be selective as we right-size our pipeline to focus on our best opportunities.

We look forward to working with you to adjust our sails and move into the future of wind energy. A strong company like ours, with a multi-billion dollar portfolio of power plants to operate, and the backing of a financially strong parent company, is positioned to capitalize when regulatory conditions and markets improve.

Five Questions With Nisa Stroh, Senior Market Analyst

It takes a keen mind to track wind power prices in a regulatory environment that changes dramatically from state to state across North America. To keep her eye on this moving target, Nisa Stroh, senior market analyst at Iberdrola Renewables, constantly balances factors as varied as competitor construction activity and wildlife regulations. We recently caught up with Nisa to find out more about her job and the role analysis plays at our wind farms.

LN: What do you do in your job?
Stroh: I monitor all federal and state energy policies and translate my findings into forecasting what the outlook is like for the renewable energy market. The result of my work is an attempt to forecast the value of a renewable energy certificate (REC).

LN: Why are these certificates so important?
Stroh: These certificates are commodities traded in over-the-counter markets or bilateral contracts. Each REC represents proof that a company has generated one megawatt-hour of electricity from a renewable power source, such as wind. A REC's value is essentially the premium someone is willing to pay for renewable energy, as opposed to generic, regular energy from coal, natural gas, nuclear or other sources. RECs react to market pressures and regulations just like any other commodity. Because our projects produce renewable energy and RECs, the RECs can be a significant revenue stream for a project, so it's important for us to have informed forecasts of their value. That's where I come in.

LN: What affects the value of renewable energy certificates?
Stroh: Renewable energy certificates are a policy-driven market based on simple supply and demand economics. If policy is made more stringent and demand outstrips supply, values rise. If loosened, they fall. And every state's policy is different.

LN: How many states have certificates?
Stroh: There are 29 U.S. states with a renewable portfolio standard (RPS), a regulation that requires increased production of energy from renewable sources. Suppliers compete, and sometimes cooperate, for the contracts to fulfill a state's RPS. RECs are used to show compliance with RPS mandates or, in some states, instead of buying the actual renewable energy generated.

LN: What's a challenging aspect of your analytical job?
Stroh: I must account for a variety of factors in my forecasting, such as which technologies qualify for a state's RPS or an individual utility's retail electric demand. I must know the market landscape of a state that passes an RPS and anticipate the possibilities. The situation in the state of Illinois alone illustrates the complexity at work. Illinois passed an RPS that required 75 percent of wind power to be created in-state. There was a spike in REC values due to a limited supply pool. Then the legislature changed the RPS to allow wind from adjacent states and the value of RECs essentially collapsed, with prices going from $20 (equal to 2 cents per kilowatt-hour) to $2 (0.2 cents/kW-hr).

2012: Make-or-Break Year for Wind Power

As we shared in the last issue, the American wind industry is facing a challenging 2012. The existing Production Tax Credit (PTC) for wind, hydroelectric, geothermal, bio-energy and municipal solid waste forms of electricity generation will expire in 2012 unless Congress takes action.

The PTC is a tax incentive that helps energy developers raise private funds to bring renewable energy projects to completion.

According to the American Wind Energy Association (AWEA), failure to extend the PTC will lead to job losses and will put the brakes on the progress the United States has made toward including clean, affordable, homegrown energy as part of its electricity portfolio. We have already seen industry job losses due to this pending legislation. In the years following previous PTC expirations, new wind installations dropped by between 73 and 93 percent, according to association records.

Iberdrola Renewables encourages you to take action and support extending the PTC in 2012. Contact your U.S. Representative and ask for their support for HR 3307. Find your representative's phone number and email address at www.house.gov or use this AWEA directory tool: http://capwiz.com/windenergy/moaa/dbq/officials.

State Studies Confirms No Evidence of Health Effects From Wind Turbines

Wind power and turbines have been under scrutiny lately, but two independent reports are confirming what the industry has known for a long time: wind power is safe.

The Massachusetts Department of Environmental Protection and the Massachusetts Department of Public Health recently released a report that found, "there is no evidence for a set of health effects from exposure to wind turbines that could be characterized as a 'Wind Turbine Syndrome.'" The independent panel of experts who performed the study included physicians, engineers and professors from Harvard, Boston University and University of Massachusetts at Amherst.

The panel set out to identify public concerns about wind energy turbines, evaluate data from peer-reviewed scientific studies and provide best practices for wind power. Their findings focused on three areas of concern for the public, including noise and shadow flicker.

Sound

Depending on wind speed and direction, wind turbines can produce noise. Sounds have been described as a "whooshing" or thumping and have been perceived to increase at night. The panel reviewed epidemiological evidence and infrasound studies to determine the health impact on noise from wind turbines and their potential for health effects, including sleeplessness and impacts on the vestibular system.

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Questions? Have a story to tell?

Questions or comments relating to Landowner News? Have a story to tell? Would you rather receive an electronic copy to save paper? We'd like to hear from you!

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(Health Effects From Wind Turbines ... continued)

The studies found:

- While some people might be annoyed by wind turbine generator sound, there is insufficient evidence that noise from wind turbine generators causes health problems or disease.
- Claims that infrasound from wind turbines directly impacts the vestibular system have not been demonstrated scientifically.

Shadow Flicker

Shadow flicker occurs as the wind turbine blades rotate between the sun and the observer. The public has expressed concern that these flashes could lead to health effects. The panel looked at scientific evidence and found "that shadow flicker does not pose a risk for eliciting seizures as a result of photic stimulation."

Best Practices

To keep the public safe and confident in wind power, the panel created a list of best practices for landowners and the wind power industry. Its sound pressure level nighttime limits are based on the wind power guidelines from countries generating wind power successfully such as Germany and Denmark. The panel also referred to shadow flicker guidance from Germany including time limits on possible shadow flicker. Their recommendation for preventing danger related to ice throw includes restricting access to wind turbines during weather that might lead to ice on the blades.

This Massachusetts study, which can be found at www.mass.gov/dep/, confirms what landowners and the wind power industry has experienced: with some common sense precautions, wind power is a safe, green power source for communities where wind farms exist and for those benefiting from the power they generate.

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