

## Industry At Large: Utilities

# Utilities Have Options When It Comes To Wind

*Joint ventures between utilities and renewable energy companies  
may be a winning strategy.*

BY DANIEL LARCAMP

In light of President Obama's energy agenda, there remains little doubt that the U.S. will see a significant increase in renewable resources – particularly wind – over the next decade.

While the current credit crisis has made financing wind projects more difficult, this should be only a

temporary distraction, given that 28 states and the District of Columbia have already passed renewable portfolio standards (RPS).

Electric utilities' appetite for renewable energy in general, and wind in particular, will continue to grow; however, if that appetite will be satisfied remains uncertain. Options

include traditional power purchase agreements (PPAs), direct ownership or a combination of the two.

Given the uncertainty surrounding the economy and possible regulatory changes, middle-ground approaches involving a sharing of risk and benefits between developers and utilities may become more common.

Wind is nothing new to farmers, ranchers or utilities, where windmills have pumped water for more than a century and were not replaced with electric pumps until the Rural Electrification Act in the 1930s.

Regulatory changes such as RPS present utilities with new demands and opportunities to invest in wind

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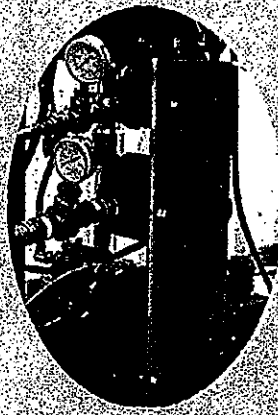
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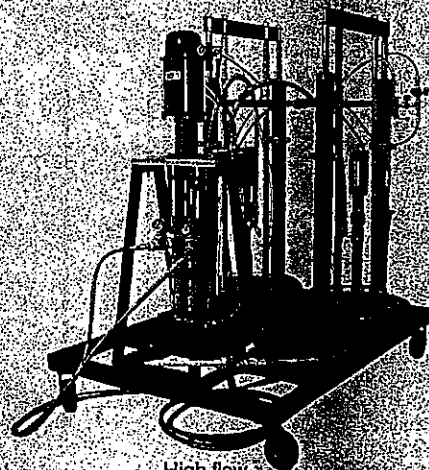
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turbines and other renewable generation in ways that are reminiscent of the qualifying facility days of the late 1970s and early 1980s.

The last gold rush for wind stemmed from the Public Utility Regulatory Policies Act of 1978, which established a class of small power facilities (QFs) that were exempt from most federal and state regulation and that received favorable avoided-cost prices if they met certain technical standards regarding energy source and efficiency.

However, ownership of QFs was limited to persons not primarily engaged in the generation or sale of electric power. This meant that utilities could participate in joint ownership of QFs but could own no more than a 50% interest.

In the 1980s, California was the first state to take the initiative to further encourage investment in renewable energy generation by adopting generous tax credits and state-mandated standard utility contracts that guaranteed a satisfactory market price for wind power. By the time the tax credits expired in 1985,

California had installed more than 1.2 GW of wind power, which, at the time, was almost 90% of global capacity.

The wind energy industry got another boost in 1992, when Congress enacted the Energy Policy Act of 1992 (EPAAct 1992). That bill provided a production tax credit (PTC) of 1.5 cents for every kilowatt-hour of electricity produced from wind during the first 10 years of operation for projects installed by 1999. Congress has intermittently extended and/or reinstated the PTC every few years since, which has led to boom-and-bust cycles for installing renewable generation.

In 2005, the Energy Policy Act of 2005 (EPAAct 2005) eliminated the 50% ownership limitation, permitting traditional utilities to own QFs without taking on joint-venture partners. It also allowed termination of the mandatory purchase and sale obligations in certain circumstances.

In the meantime, more than half of the states in the U.S. have adopted an RPS to further increase the amount of renewable energy production. These rules obligate utilities to

purchase a certain portion of their energy supply requirements from renewable resources.

In some states, aggressive RPS standards have increased demand, which has led to higher prices and scarce availability of renewable generation. Utilities are well-positioned to invest in renewable generation to meet this increasing regulatory and customer demand.

### Opportunities

Even before President Obama announced his renewable energy expectations, the regulatory landscape presented ample opportunities for developers and utilities alike to aggressively pursue wind development. This climate will only get more favorable, given that Congress is poised to pass a federal RPS.


In addition, the recently enacted federal stimulus bill provides several tax incentives that make it easier for utilities to meet their renewable energy requirements. It provides \$20 billion in tax cuts for alternative energy, including extending the PTC for wind through 2012. By itself, this

provision guarantees that stimulus spending will continue through at least 2023.

Developers of projects eligible for the PTC were also given two other valuable options. They can either make a one-time election to receive a 30% energy Investment Tax Credit (ITC) in lieu of the PTC, accelerating the tax benefit so that it can be claimed in the year of project construction rather than only at the later date when the project has been completed and produces actual generation. Alternatively, developers can apply to the Treasury Department for a tax-free Section 1603 grant equivalent to either the PTC or the ITC amounts during 2009 or 2010.


So, the real question is not whether utilities will increase their renewable portfolios, but by how much and when. Given the removal of ownership limitations of QFs that qualify for favorable regulatory treatment, more utilities are debating the merits of buying to meet their demand for renewable energy versus building, as the build option gives the utility the opportunity to recover the costs of

Wind Resource Assessments	Environmental	BOP Design	Turbine Assessments	Construction Management	Commissioning	Due Diligence	Interconnection Assessments
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its wind generation through its existing rate base. There are pluses and minuses on each side of this equation, which may be heavily weighted by the desires of the relevant state commissions.

**Build or buy?**

A utility may choose to continue to purchase renewable power from independent generators for several reasons. Purchasing power minimizes investment risk, because the utility would have no responsibility for the project development or generation assets. In general, a contract for firm power delivery guarantees that the utility will receive the contracted amount of power – or at least the applicable replacement costs.

Purchasing instead of building also allows a utility to add small amounts of renewable power incrementally, increasing purchases to meet greater renewable energy demand or RPS goals without incurring large capital investment costs. However, purchasing renewable energy arguably increases operational risk for utilities.

Owning the wind facility may provide a utility a greater level of control over the generation assets, equipment maintenance and upgrades. Moreover, owning its own renewable generation facility also can be a more visible demonstration of a utility's commitment to renewable energy development.

A third option that utilities are increasingly considering is the joint-venture approach, where utilities and independent developers share the benefits and risks of building renewable generation.

Joint ventures allow a utility to invest in larger wind projects and achieve economies of scale that may not be possible with 100% ownership. Additionally, the risk of an individual project can be shared among the partners, and such sharing can be adjusted over time to reflect the value of the PTC and the ITC to individual partners.

Recently, utilities have announced such joint venture projects to build renewable generation facilities. Last year, Dominion Resources announced that it acquired a 50% interest in the Fowler Ridge Wind Farm in Indiana from BP Alternative Energy Inc.

The Fowler Ridge project is expected to generate about 750 MW and will be built in two phases. Under the terms of the agreement, Dominion and BP are joint owners for 650 MW, and BP will retain sole ownership of the remaining 100 MW. Dominion has entered into a long-term

PPA for 200 MW from the facility.

In other renewable sectors, Pacific Gas & Electric recently announced plans to build 500 MW of solar energy projects to meet its requirements under the California RPS. Utilities in the Southeast are also investing in joint ventures to build renewable energy facilities. Duke Energy announced a joint venture with France's Areva SA to develop

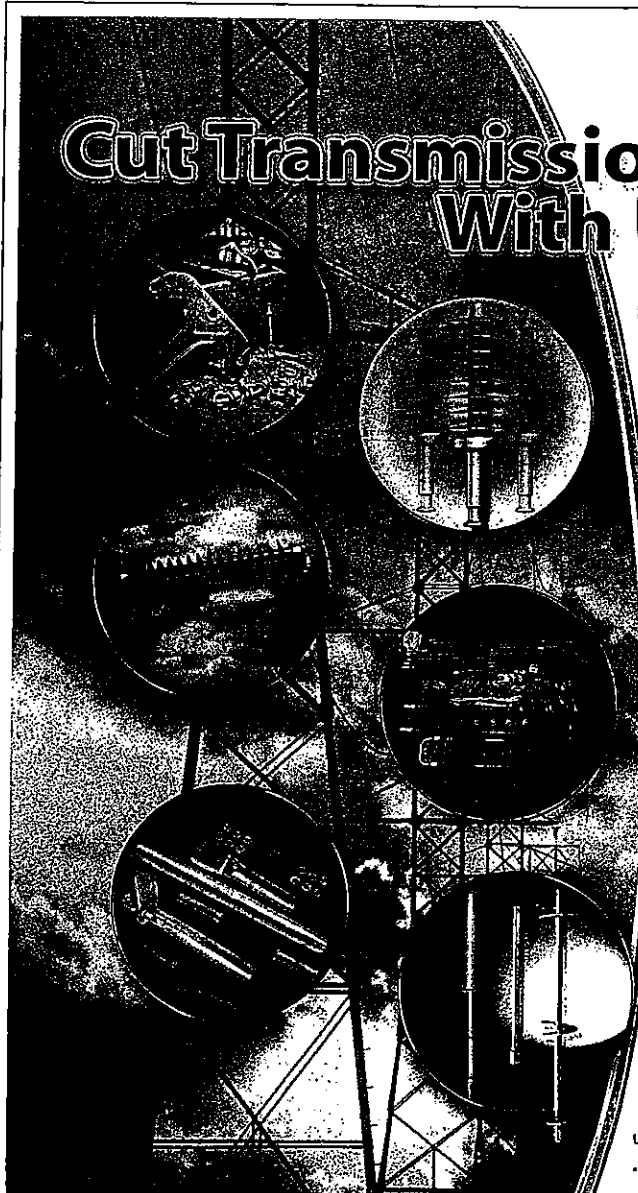
biomass plants fueled by wood waste.

Also in September 2008, Georgia Power, a subsidiary of Southern Co., asked state regulators for permission to convert a coal-fueled power plant to a wood-fired plant. After conversion, the plant would produce 96 MW of electricity.

These beneficial joint ventures should expand as more utilities like FPL Group (with its subsidiary Nex-

tEra Energy) become comfortable with the positive investment opportunities for wind resources. *WP*

*Daniel Larcamp is a partner in Washington, D.C., law firm Troutman Sanders' energy practice group and advises both traditional and renewable energy companies on regulatory compliance. He can be reached at (202) 274-2950.*



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