

New Idea Blows In Wind Power Makes Inroads In Valley

By [Dan Wright](#)

With one wind energy project getting a green light and another one being explored, western Virginia is suddenly on the renewable energy map.

This week, the deadline passed for interested parties to appeal the permit for a 39-megawatt wind energy farm in Highland County.

And a Wyoming consulting firm is studying a wind-power project that covers parts of Rockingham County and Pendleton and Hardy counties in West Virginia.

The 30-day appeal period expired Tuesday for the State Corporation Commission's conditional approval of a wind farm planned by Highland New Wind Development LLC. The \$60 million project would build up to 22 wind turbines in western Highland County. Meanwhile, Western EcoSystems Technology Inc. of Cheyenne, Wyo., would not name its client or the specific location.

But the U.S. Department of Interior's Fish and Wildlife Service told Western the site was high-risk because it could harm animals protected by the Endangered Species Act, the Migratory Bird Treaty Act and the Golden Eagle Protection Act.

Great Interest

A spokesman for Highland New Wind said he is surprised that no appeals were filed opposing the project's permit.

"We fully expected an appeal and another year of delays," Frank Maisano said. "We were surprised the deadline passed without an appeal."

The firm will begin to organize its construction schedule and secure financing, said managing partner Henry T. "Mac" McBride Jr. of Harrisonburg.

McBride's initial plan called for 1.5-megawatt turbines. Three-megawatt turbines are now available, he said, which could reduce the number required from 19 to 12 or 13. "And turbines are in tight supply," he said. "It might be as late as 2010 before we can buy the turbines."

The immediate concern is to arrange financing. The firm needs to "partner up" with a major player, McBride said.

Maisano said the project has generated great interest.

"In the next three or four months, we'll know for sure about investors," he said.

Most Cost-Effective

Investment groups are interested in wind energy because it is the most cost-effective energy technology available, said Jonathan Miles, professor of Integrated Science and Technology at James Madison University.

On average, wind facilities can generate electricity for 3 cents to 6 cents per kilowatt/hour, Miles said.

Coal-fired plants produce electricity for 2 cents per kilowatt/hour in some cases, 5 cents to 7 cents in others. Nuclear-powered electricity generation costs 6 cents to 10 cents per kilowatt/hour, he explained.

"Some astute investors are looking at wind energy because you can reliably predict the costs," Miles said. "It's a significant capital investment, but from a financial point of view, it's attractive."

But wind energy is dependent on subsidies and tax breaks, according to Rick Webb, senior scientist with the Department of Environmental Sciences at the University of Virginia.

"Over the past decade, development of wind projects has been a function of production tax credits," Webb said. "About 65 to 75 percent of the cost of these projects is borne by taxpayers."

But investors are taking a "high interest" in wind projects, he added.

"They stand to make a lot of money," Webb said. "But they have a lot of money at risk." Wind energy is a new industry, Miles added, and profit margins are not well established.

Wind Growth

Wind is the nation's fastest-growing energy technology, according to the U.S. Department of Energy.

In 2007, wind energy capacity increased 45 percent with a \$9 billion investment into the U.S. economy. And 30 percent of new electrical capacity is wind, enough to power 1.5 million households, the DOE said.

On that scale, the project in Highland County seems small.

Reducing it even further, a wind farm typically produces one-third of its rated capacity. So McBride's wind farm would be the equivalent of 13 megawatts.

"But that's still quite good," Miles said.

At 13 megawatts, the Highland farm would produce 115 million kilowatt/hours in a year, enough to power about 12,750 homes, Miles explained.

"If the wind in Highland is as good as people say, it could be more like 15,000 homes," Miles added.

Although he doesn't believe wind energy will ever replace nuclear, coal and natural gas facilities, there are real benefits from their development.

"If you have a wind plant, you are dumping energy onto the nation's power grid," Miles said. "That has the same effect as reducing demand."

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