

Throwing risk to the wind

Mahanoy Twp. power farm was dream of Schuylkill couple.

By Bob Laylo Of The Morning Call

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Joe and Angel Green tossed their life savings to the wind.

The Shenandoah couple wiped out their bank account, mortgaged their home and maxed out their credit cards in the hope they could develop a wind farm atop Locust Ridge in Mahanoy Township.

On Tuesday, four years after the Greens started the project, blades attached to 400-foot-tall towers turned in the warm southwest breeze as Gov. Edward G. Rendell touted wind farms as a way for the state to gain energy independence, protect the environment and create jobs.

"This project shows the kind of growth we can achieve by committing ourselves to clean and renewable energy, and by making the strategic investments necessary to attract leading companies that create quality jobs for our men and women," he said.

As Rendell spoke, the Greens beamed with pride about their project, which has been acquired by Iberdrola, a multinational company that is the largest owner and operator of renewable energy facilities in the world.

Four years ago, Joe Green was a sales manager for an electronics company, and frequently traveled the mountaintops along Interstate 81. The winds atop the mountains often buffeted his car, giving him the idea for a wind farm.

Before investing hundreds of thousands of dollars, Green told his wife about the idea as they walked in Shenandoah.

"She said I love your ideas, but you never follow through," Green said. "I said thank you for your support."

So the couple, who have three young children, started their project.

"It was scary," Angel Green said. "It was a big gamble."

Joe Green selected the 1,038-acre site in early 2004, and in the summer of that year, put up a test tower. He followed through with environmental studies as he secured permits.

In 2006, the project caught the attention of Community Energy, which bought it. Community Energy later was bought by Iberdrola, and Green now works for the company as a senior developer.

The 13 towers stand about 400-feet tall, and are easily visible from I-81. They produce a total of 26 megawatts, or enough power to supply 6,300 homes.

Green said the company has permits to build 13 more turbines on Locust Ridge, and there's a chance the expansion could be larger.

Brent Alderfer, executive vice president of Iberdrola's U.S. subsidiary, said the blades start turning in a gentle breeze of 8 mph, and reach full generation in 15 mph winds. They are shut down when winds reach 45 mph to prevent damage, Alderfer said.

He said the turbines produce maximum power about a third of the time, and the company will need 20 years to fully recoup its investment. Wind power, Alderfer said, costs about 25 percent more to generate than traditional sources.

It's the second wind farm that Iberdrola owns in Pennsylvania. The other is in Bear Creek, near Wilkes-Barre, Luzerne County.

The Locust Ridge site is on a mountain above Mahanoy City, a borough which thrived when coal was king and has suffered since. Rendell said wind power is now part of Pennsylvania's future.

"It can do for Pennsylvania what coal and oil and gas did for us in the '20s and '30s and '40s and '50s," Rendell said of wind power and other alternative energy projects.

Rendell said a 2004 state law requires 18 percent of the electricity sold from utilities to retail customers must come from renewable energy sources, including wind, by 2019. The state expects wind power to serve as many as 1 million homes when the legislation completely kicks in.

"It created a marketplace," Rendell said.

Iberdrola has a 20-year contract with PPL Corp. to purchase all of the electricity generated at Locust Ridge.

Alderfer said PPL's commitment was important because helped it get financing for the project. The project cost about \$40 million.

PPL Executive Vice President William Spence said 10 percent of the company's electricity is generated by alternative energy. Spence said PPL has budgeted \$100 million for alternative energy projects over the next five years.

Rendell used the occasion to call on lawmakers, who are now debating a budget, to approve his Energy Independence Strategy.

The plan calls for the state to invest \$850 million in alternative and clean energy fuel projects over the next decade. Some of the initiatives would be partly funded by a new electricity tax costing the average residential customer 45 cents a month, according to the governor's office.

The strategy would decrease Pennsylvania's reliance on fossil fuel by increasing production of home-grown clean energy, such as corn- or soy-based biofuel and wind or solar power. Overall energy consumption would decrease through conservation, including a plan to charge customers different rates at different times of day, giving an incentive to use less power at times when demand is highest.

It would require every gallon of gasoline sold in the state to include 10 percent ethanol, and every gallon of diesel to have up to 20 percent of soy or other renewable oil.

"If we are going to continue the progress, the Legislature has to pass it," Rendell said.

Schuylkill County has a few other alternative energy projects. A plant that would convert coal to oil has been proposed for Mahanoy Township by John W. Rich Jr. That project has received a \$100 million federal loan.

Green Renewable Energy, Ethanol and Nutrition, Holding LLC of Zionsville has proposed a \$227 million corn-to-ethanol plant just off the Tremont exit of Interstate 81 in Porter Township. That plant would turn 40 million bushels of corn into 100 million gallons of ethanol each year.