

## Natural Resources

# Gratiot's fortunes shifting in the wind

By RHONDA DEDYNE

**B**EING “green” — it seems like everyone is staking a claim on the popular color these days. For farmers, though, the current trend of implementing green technology is old news. Respect for the land is the foundation of any successful agricultural operation, and that focus has always included strategies that are earth friendly.

Wind energy is a prime example.

Windmills, the forerunner of today's wind turbines, were part of the landscape on every farm site just a couple generations ago. Like their ancestors, farmers today also understand the benefits that can be derived from wind power — on a much larger scale.

“Having a strong agricultural community is important in the development of commercial wind projects,” says Rich VanderVeen, president of Mackinaw Power LLC and founder of Wind Resource that is developing a 200-megawatt wind farm in Gratiot and Saginaw counties.

“Farmers know how to take care of the land, they know how to run a business, and they understand that wind projects will be part of their ag future,” he says.

## Community support vital

In his role as president of the Michigan Sustainable Energy Coalition, VanderVeen is an advocate for renewable energy in general and wind power in particular.

He's learned the importance of community support in developing wind farms from past experiences, like the successful Mackinaw City Wind Project, the Great Lakes' first privately owned, commercial wind power project that began operation in 2001.

Gratiot's location is different, but the process is the same.

“We started three years ago, talking and working with residents and landowners about the potential for wind power in the area,” VanderVeen says about the project that includes acreage in the northeast quadrant of Gratiot County. “From the perspective of a developer, it's extremely important to provide good information and very helpful for us to have everyone working together.”

## Key Points

- Countywide zoning ordinance aids development of large-scale wind projects.
- Adjacent property owners benefit from pooled lease agreements.
- Construction of the Wind Resource project is targeted to begin in 2010.

## Ditto for the landowners

“We've been concentrating on energy since before it was in vogue, and have been working with all the municipalities and landowners in the county on their collaborative involvement,” says Don Schurr, president of Greater Gratiot Development Inc.

The outcome is a countywide ordinance that provides uniform zoning for large-scale wind projects. Gratiot County's Utility Scale Wind Energy Overlay Zoning Ordinance will provide guidance for developers like VanderVeen and others that are currently collecting wind data from meteorological, or “met,” towers around the county.

“I've never seen local governments work together this openly and responsibly,” Rich Polich wrote in a testimonial on behalf of Tradewind Energy LLC. The Kansas-based company has sites under study in southwest Gratiot County.

## Where the wind blows

On the surface, an inland area like Gratiot County in the middle of the state might seem like an unlikely location for a large-scale wind project. The county doesn't look much like the Straits of Mackinaw, or Huron County in the state's Thumb where another wind farm, John Deere Renewable's Michigan Wind 1, was officially dedicated recently.

Results from met towers in Gratiot County have been encouraging, however.

“We've collected more than a year's worth of wind data, and studied the potential for wind energy here,” VanderVeen says, citing positive test results and noting another factor that makes the locale a wind project candidate. “There's good wind, but developers also need access to transmission lines. Gratiot has that on both the north and south ends of the county.”

Actually, plugging into those lines



means clearing another hurdle.

“The ITC owns all transmission lines in the nation. We filed for an interconnection agreement that will permit access to the grid, and are confident that we will gain approval,” VanderVeen says.

## The Gratiot process

Getting buy-in from landowners is equally important. In Gratiot County, as elsewhere, easement agreements are the tools that help turn wind into power.

“Both Tradewind and Wind Resource held several public meetings to provide information on their projects and on lease arrangements,” says Chelsey Foster, project manager at GGD. “One turbine on a property can result in as much as \$15,000.”

A number of landowners in the county came up with the idea of pooled lease arrangements, whereby adjacent property owners may also derive financial benefits from wind energy projects.

“It's sort of like a 'good neighbor agreement,’” Foster says. “If a neighboring landowner has to look at a turbine next door, why shouldn't they get some of the lease funds?”

While lease payments certainly may be appealing to farmers, VanderVeen believes that wind power has even greater benefits for farmers. “One of the attractive aspects of wind energy is that ag land remains usable as ag land. Producers can continue to farm the land just like they always have and receive a

handsome easement payment.”

Visualizing wind turbines in fields of soybeans or corn does require a certain amount of imagination. That's particularly true due to the sheer scale of a commercial wind park.

“For every 100 megawatts of wind energy that's produced, you need to have at least 5,000 acres,” VanderVeen says, adding that Wind Resource has “considerably more than that” in the local project where construction is targeted to begin in 2010.

The developer has a suggestion for Gratiot farmers, or any ag producer who may be considering leasing land to a wind utility: Check out existing sites.

“When we opened the Mackinaw City project in 2001, we had a series of open houses for the public so that they could see how wind energy is used. We'd still encourage people to visit wind projects like ours, or go see the turbines in Huron County.

“Hopefully, it can help them gain a better understanding of the benefits of wind energy.”

## More facts on wind parks

- Wind park requirements include consistent wind, topographic relief, elevation, proximity to high voltage transmission lines, environmental suitability and compatible land use.
- Meteorological towers with anemometers and wind vanes collect and study wind speeds, wind direction, air density and other data at multiple locations across each site.
- Aspects of a wind project design include a detailed environmental survey, an electrical interconnection study to determine how the project will link with the local high-voltage transmission system, the positioning of each turbine across the site and a detailed construction plan.
- The construction phase involves building roads and foundations for the towers, and constructing the substation and interconnection facilities.
- Wind parks are expected to operate for a minimum of 20 to 30 years.

## Wind Web sites

Information on wind energy and wind parks is available at numerous online sites, including:

- [www.michigancleanenergy.com](http://www.michigancleanenergy.com)
- [www.windpoweringamerica.gov](http://www.windpoweringamerica.gov)
- [web1.msue.msu.edu/wind](http://web1.msue.msu.edu/wind)