

## Minnesota Wind Industry: Job Creation and Economic Stimulus

The Minnesota wind industry is one of the most progressive in the country. Currently the state ranks fourth in U.S. for the most wind energy installations, topping out with just over 1,800 megawatts. These 1,800 megawatts will produce enough electricity to power 450,000 homes.

The state also has one of the most stringent Renewable Portfolio Standards (RPS), requiring utilities to purchase 25% of their electricity from renewable energy sources by 2025. Xcel Energy has executed a more rigorous standard beyond that, requiring that 30% of its energy come from renewables.

In fact, since 2005 Minnesota has dramatically increased its wind capacity, growing about 31 percent every year.

The RPS will require the state to increase its wind power capacity by an additional 4,000 megawatts which is enough to power nearly 1 million homes.

The economic and job-creating stimulus the RPS has is enormous. In fact, over the next 17 years, 2,200 construction phase jobs will be instated along with more than 900 sustained jobs during the operations period of the wind farms. 1,422 of these are estimated to be in the turbine supply chain, and 190 new jobs are expected to be created in the construction sector and in project development related services.

The construction phase will pump nearly \$9 million dollars into Minnesota's economy throughout this 17 year period. Operations costs would propel another \$1.5 billion annually into Minnesota towns.

A great portion of the jobs created would be in the manufacturing sector, especially hit hard by the economic slowdown. Minnesota ranks 13th in the number of workers already in wind-related industries and 14th in the number of

### Minnesota Wind Facts Corner

Over the next 17 years our 25% by 2025 Renewable Portfolio Standard will:

-Add 4,000 megawatts of wind energy to the state, enough to power 1 million homes

-Create 2,200 construction-phase jobs and 900 sustained jobs during wind farm operations

-Pump \$9 million into our economy during construction phases

-Propel an additional \$1.5 billion annually into Minnesota towns

Source: Minnesota 2020  
www.MN2020.org

actual companies engaged in related manufacturing processes.

Community wind projects also have an advantage over traditional, corporate-owned developments in regards to job creation and economic stimulus. The National Renewable Energy Laboratory's Eric Lantz reported that community wind, when compared to hypothetical average corporate-owned projects, has construction-period employment impacts that are 1.1 to 1.3 times higher and operations-period impacts that are 1.1 to 2.8 times higher than corporate-owned wind. Lantz went on to further conclude that community-based wind farms overall have greater economic impacts over corporate-owned developments because landowners retain an ownership stake in the project's profits.

However, wind farms need to be financed in order to achieve these construction and operations period benefits. Prior to the recession, most wind projects were financed via the Production Tax Credit (PTC). Typically the financiers utilizing this credit are institutional investors who have high passive income and tax liability to offset the PTC. The current session has reduced this pool of investors capable of using the PTC, along with available debt financing.

But government stimulus has helped revive the wind industry in 2009. The American Recovery and Reinvestment Act signed in February 2009, contained several provisions to aid the development of wind energy over the next several years.

- 3 year extension of the Production Tax Credit beyond 2009
- an option to elect a 30 percent Investment Tax Credit in place of the PTC. The credit can then be converted into a grant for project beginning construction or starting operation in 2009 or 2010.
- a new 6 billion Department of Energy (DOE) renewable energy loan guarantee program

To utilize these options, companies are required to begin construction of their wind farms prior to 2011. As of September 2009, the DOE has already distributed over 1 billion dollars in grants to renewable projects across the country.

This is one step in the right direction, however, to continue Minnesota's robust wind energy growth, more stable long-term public policies are needed in regards to project financing. Also, a variety of tax incentives could be utilized to attract more in-state manufacturing activity, including generation subsidies and below-market loans that promote projects that use turbine components manufactured in Minnesota. All of these items are being considered.

Once policy stability is achieved, the state has the ability to continuously see the extended economic value wind energy can provide for generations to come.



FALL 2009 NEWSLETTER

# Feedback from the Footprint

The changing of the seasons has harvested much progress for Root River Energy. Many milestones have been attained over the last several months. The number of acres signed is now close to 20,000, including significant activity in Mower County. A one-year wind study has been completed, our 250 megawatt interconnect study is moving forward, and a new field office is opened.



### IN THIS ISSUE:

- Site-Control Advances; Lease is Amended
- One year wind study complete
- Mower County Footprint Gains Momentum
- Local Office Opens
- Minnesota Wind Industry Update

### GREETINGS FROM YOUR BOARD OF ADVISORS AND NATIONAL WIND

On behalf of your Board of Advisors and National Wind, we are proud to provide this exciting update about Root River Energy.

Root River Energy, LLC was formed in July 2008 to develop up to 300 megawatts of clean, renewable, community-owned wind energy in Fillmore and Mower Counties.

Important objectives are now accomplished, helping the project evolve further. These include achieving a noteworthy site-control milestone in both our Mower and Fillmore County footprints that puts us close to signing two thirds of the acreage required.

We have opened a brand-new field office at the Ostrander Farmer's Co-op located at 208

Main Street, #4, P.O. Box 156, in Ostrander, providing a new local identity for the project.

As Root River Energy continues to make progress, we want to share this valuable information with our landowners and community members along with news about the wind industry in Minnesota.

Read on to learn more!

## Contact us

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## Site Control Advances; Lease Amended, Helping Meet Farming Needs

Root River Energy's field team, consisting of Jim Connolly and Barry Rogne, are proud to announce that they now have nearly 20,000 acres of land under lease. The project has gained momentum, with 10,000 acres signed in the last few months. This makes Jim and Barry one of National Wind's most productive field teams during this period.

This is now two-thirds of the acres needed to develop a 300 megawatt wind farm. Over 7,600 of these acres are located in our Mower County footprint (see the article below). Our overall goal is to sign 30,000 contiguous acres.

"We have seen increased interest from the local community over the past several months," says Rogne. "Part of the amplified interest is due to the fact that landowners are coming to the realization that we have a great offer on the table and that our project has gained significant momentum over the last few months."

Positive landowner relations are essential to having a successful community wind farm project, and that is something the Root River Energy team considers a high priority.

For example, a common landowner concern has to do with the design of access roads. Access roads are fundamental to development and need to be constructed to effectively transport wind turbine components to their specific site location. They also allow operations and maintenance personnel access to the turbine during the life of the project to perform routine inspections that ensure the facility is

working properly.

"An amendment to the lease has been drafted which commits our development team to designing roads that conform to existing farming practices as much as possible," adds Rogne. "This means

building roadways that run in the same direction as field operations, in order to minimize the loss of efficiency in farming procedures. We definitely allow for landowner input in access road construction; our goal is to work with you to come up with the most viable option."

The amendment also provides those landowners that do not receive a turbine, an additional payment if access road construction is needed on their property.

"As more landowners become involved, local support grows and people realize that 'hey my neighbor thinks this is a good deal, so I should consider it too,'" says Rogne. "Word of mouth helps, but now I think we've really made some good connections with landowners and we can build on that. People realize that we are here for the long haul and more importantly that we are here for them and the community."

If you are interested in learning more about Root River Energy, please contact Jim Connolly at 507-259-8841 or Barry Rogne at 507-581-6888.



Lease amendment commits development team to designing access roads that conform to existing farming practices.

## Root River Energy Completes One Year Wind Study

A wind assessment is a fundamental component of wind farm development. This assessment is essential to determining overall wind facility profitability and providing an accurate estimation of energy production.

A standard practice is to collect at least one year of on-site wind data to make an accurate analysis. Most leading financial institutions require a minimum of one year of on-site data before they will even consider investing in or providing financing to a wind energy project. As of the end of October 2009, Root River Energy will have reached this crucial milestone, allowing us to produce a full one year wind study.

Collecting on-site data requires the installation of measuring equipment designed to collect wind data at the height of at least 40-80 meters, in what is referred to as a wind data acquisition program. This equipment, known as meteorological towers, are temporary structures supported by guy wires that are sited and installed in the project footprint. Multiple towers are usually needed for larger projects in order to improve the accuracy of the overall analysis.

National Wind's approach is to deploy taller towers that measure wind at the 80-meter height at which wind turbines operate, also helping increase accuracy. National Wind Assessments, a well-recognized and experienced wind resource analysis firm, is conducting the wind acquisition and analysis program for Root River Energy.

In October 2008, the National Wind Assessments team installed Root River Energy's 80 meter met tower in Fillmore County. There are plans to install an additional 60 meter meteorological tower in the near future, possibly in the Mower County footprint.



Wind assessment team installing Root River Energy's 80-meter met tower in Oct. 2008.

One year of data is a healthy representation of the on-site wind speeds and direction across seasonal changes. With this data, a correlation can be made with long-term weather data documented over the course of ten years or more, based on devices installed in such locations as airports. This comparison helps determine what year to year adjustments are to be made to the one year data set to provide an accurate long term estimation of the project wind resource.

Our overall goal is to produce a wind resource analysis that helps ensure the financial viability of the wind farm and provide the information necessary to design a productive wind farm that meets the needs of landowners in Fillmore and Mower Counties. After all, this is your community-owned wind farm development and we want to do it right.



Safe Accurate Complete

## Mower Footprint Gains Momentum: Over 7,600 acres Signed

We announced in the spring of 2009 our project expansion into the eastern parts of Mower County. The Root River Energy team feels Mower County is a valuable addition to the project footprint given its favorable topography, wind signature and agricultural land use. Jim Connolly and Barry Rogne have been working with landowners over course of the last several months to sign acres for the new footprint. Currently, they have over 7,600 acres under easement and they are in discussion with an additional 50 landowners about participating.

"We are off to a good start and we are receiving a positive community response in the new footprint," says Connolly. "The project expansion has really accelerated the development. We are busy on the ground working with landowners and we are confident that the new Mower County area will help Root River Energy create a well-rounded, productive wind farm for the community."

### Mower County, Minnesota



7,600 acres are signed as of Oct. 2009 in Mower County. Discussions continue with another 50 landowners about their participation.

If you are a Mower County resident and interested in learning more, feel free to contact Barry or Jim at your leisure.

## Root River Energy Opens New Local Field Office

Root River Energy is pleased to announce the opening of a local office in Ostrander, MN. The office is located in the new Ostrander Farmer's Co-op at 208 Main Street, #4, P.O. Box 156. The new local headquarters will allow Root River Energy to better address the growing demand for involvement in the project, along with improving services to the current participating residents.

"It's a perfect, convenient location for the local area and our target audience," says Jim Connolly. "Visiting the Co-op is a regular activity for many in the area to purchase the agricultural supplies they need. Now in a sense it will be a one-stop shop for farmers who want to learn more about harvesting their other crop, wind energy."

The office will further function as a local, informational resource for anybody in the community that is interested in knowing more about the project and what locally-owned wind is all about. Communicating with the community is key to developing a wind project that works for

the local area. Information about Root River Energy will be available at the office and the local Co-op staff will assist in directing calls appropriately.

"As our wind project progresses, we want to continue to provide the best possible support and services to our participating members," adds Connolly. "Our new office allows us to do just that. Now that Root River Energy has a local identity, landowners have an even more accessible way to inquire about the project."

Although Barry and Jim are often out meeting with landowners in the project's footprint throughout the day, the Co-op's support in answering calls will help streamline the inquiry process, making it more efficient.

You can reach the office by calling 866-742-6448.