612.281.4806 hj_cummins@yahoo.com

And the Wind Waits … and waits …
The Waiting List for Proposed Wind Projects in the State is 612 Years

To anyone who wants to join the wind energy movement, Ryan Wolf says: Get in line.

Wolf, of Le Sueur, Minn., has been waiting almost two years for the go-ahead to build 27 wind turbines in the southwest part of the state.

It's anyone's guess how much longer he'll be waiting, given a backlog of applications that technically could take more than 600 years to clear at the federal agency that stands between him and the renewable energy marketplace.

"The queue is the biggest problem we're struggling with," agreed Clair Moeller, a vice president at that gatekeeper agency in St. Paul, the Midwest Independent Transmission System (Midwest ISO).

While the national mood has shifted to embrace renewable energy, and states including Minnesota have pledged increased usage, conditions on the ground are not making it easy. Developers point to shortages of the wind turbines, engineers to run them and transmission lines to carry the electricity they produce.

But many say the biggest immediate problem is the bottleneck at the regional agencies of the Federal Energy Regulatory Commission - Midwest ISO, in 15 Upper Midwest states - that give projects permission to connect to existing power lines.

And the Midwest is in the worst shape, they say, because its windy plains are prompting more project proposals than anywhere else.

Moeller's staff has adapted new procedures - one is clustering several proposals into a single study - so they expect to be able to clear the queue in 50 years instead of 600. And this spring he will ask federal regulators to approve more adaptations to further speed the process.

But every passing year drives up the cost of the projects - which is passed on to consumers. And the backlog stands in the way of Minnesota's pledge to get 25 percent of its electricity from renewable sources by 2025.

"You simply can't get there on time," Moeller said.

Midwest ISO is like a combined roadway planner and traffic cop for the 94,000 miles of power lines within its borders. Moeller runs one of its two central offices out of a one-story, warehouse-type building in a residential St. Paul neighborhood.

Engineers there control the minute-to-minute activity of every utility that sends electricity through the area's power grid.

612.281.4806 hj_cummins@yahoo.com

The agency also vets all the requests by new power projects to connect to the already congested transmission system.

Each request takes about two years to process, because Midwest ISO's obligations include locating any point along the grid that's already maxed out - even hundreds of miles away. Then it has to put a dollar figure on the work needed at those points - something similar to adding two lanes to an overloaded four-lane highway - and then give that bill to the developer.

Federal regulators set up that process as first-come, first-served, in part because everything is so interconnected. Also, by regulation, all requests must be handled one at a time. So, technically, Moeller's staff should spend two years on the project at the top of the list before proceeding to the second one, for two years, and so on. That comes to 612 years for the 306 requests now in the Midwest ISO queue.

The system functioned better when it handled the few, big coal or nuclear power plants that came along. But wind projects are small, and there are many more of them - three of every four proposals now on the list. And they take about as long to study as do the big projects.

Don't mess with Texas

Texas has found a better way, in the view of Rob Gramlich, policy director at the American Wind Energy Association, a Washington-based industry group.

That state, which is an ISO unto itself, has completely separated grid issues from its vetting process. So, when Texas ISO processes power project applications, all it has to price for them is their "driveways" - the new power lines to run between them and the grid.

That helped Texas connect three times more wind energy than any other state last year, Gramlich said.

That kind of arrangement works better in a one-state ISO, Moeller said. It's a different proposition to get the legislatures and utilities commissions in 15 states agreed and organized to maintain one another's grids, he said.

Instead, Midwest ISO has gotten permission from federal regulators to consider a "cluster" of several geographically close proposals at once, Moeller said. It also can process several proposals at the same time if they are far enough apart that they will affect different stretches of the grid.

Moeller wants the regulators to approve several more changes to the queuing system. For example, he would like some remedy to this predicament: Now, after their two-year study, project developers have three more years to decide whether to go ahead and build. In the meantime, everybody behind them in line has to wait.

612.281.4806 hj_cummins@yahoo.com

The biggest change Moeller wants is to flip the process from supply-driven to demand-driven. He would like the Midwest ISO states to develop plans for how much and where their future energy needs will be. Then, developers will have to plug any proposals into those plans.

Without that, developers hot on the renewable energy trend are overwhelming Midwest ISO with more proposals than are conceivably possible in the foreseeable future, Moeller said.

For example, even though Midwest ISO's states have announced a collective stretch goal of 12,600 megawatts of renewable energy over the next several years - half of those are Minnesota's - Moeller's agency has proposals for 55,000 more.

Another example from Moeller: The transmission system in the Buffalo Ridge area in southern Minnesota now has a customer load capacity of 40 to 50 megawatts. The windy region logically appeals to developers, and several utilities are proposing power line expansions that would add 1,900 megawatts by 2014. But Midwest ISO has proposals in its queue for 55,000 more megawatts for the region.

"That mismatch isn't always so dramatic, but there's a mismatch everywhere," he said.

As time goes by

In the meantime, all this waiting is expensive, Wolf said. He and his 14 partners submitted their proposal for a 27-turbine, 57-megawatt project in March 2006, hoping for approval by 2007, construction of one year, then opening for business this year.

"Those dates all burned by," Wolf said.

In the meantime, they have about $100,000 in expenses tied up with Midwest ISO, as well as other legal fees, permitting fees and land agreements. And they can't commit to a sales contract with a utility until they know what price they'll need to cover the costs - turbines and transformers, for example - that are rising between 10 and 30 percent a year.

Industry estimates now put total installation costs at about $1.8 million per megawatt of capacity.

"Those kind of delays are almost certainly going to overrun budgets," Wolf said.

"In our case, we haven't hit the point where we've decided to walk away from the project, but I could see scenarios for others where that would happen."