

WIND ENERGY IN MINNESOTA

Billion\$ of federal tax dollars + State mandate = wind energy in MN

THE BASICS

The point of having electrical generation is to meet the electrical demands of consumers. When you plug something in, or a business has an electrical need, we want the electricity to be available to us. The electricity on the grid, on the distribution lines and in your wall socket is not stored. The electrical providers have the task of putting electricity onto the electrical grid when and where it is needed by consumers.

Base load power comes from coal, nuclear and hydro. All are predictable, steady and relatively inexpensive. These sources can't be turned on and off suddenly to meet daily peak customer demand. Peak demand is met primarily by natural gas peaking plants.

Wind is not base load. Wind is not peak load. Wind is more like hot flashes during menopause: it's going to happen, but there's no telling when, how long, or how strong. This also tends to have a destabilizing effect on the system.

The US produces almost no electricity from "oil" with the exception of some diesel peaking plants - there is no relationship between "foreign oil" and electricity. Foreign oil products go in the gas tank; electricity comes via power lines to your outlet.

THE COSTS

Wind energy in MN has a wholesale cost about 200-350% higher than the cost of base load electricity. Between 30-40% of the revenue stream for wind energy comes directly from subsidies (tax money) and the remaining 60-70% comes from electrical rate payers. In August 2010, Xcel requested a 37.5% rate increase by the year 2016—largely driven by wind energy. New CapX 2020 transmission lines are estimated to cost Minnesota about \$2 billion to build. The longer of the 2 segments in this project is primarily to provide transmission for more wind energy projects to be built.

Seasonally, wind produces mostly in spring and fall when overall customer demand is lowest. Wind also often produces at night, when daily demand is lowest and relatively flat. The result is that MN utilities are forced to by wind electricity when it is not needed and can't be used, and then pay someone to take it off the grid. Essentially, MN pays to get rid of wind energy. Great River Energy lost \$16M this way in 2010.

Recently an attorney representing a MN wind development wrote to the Public Utilities Commission (PUC) explaining that if the PUC can hurry the process, thereby ensuring the company can collect the federal Section 1603 grant money, this would make the electrical rates lower for consumers. How many of you pay taxes? How many of you pay an electrical bill? So, in this case the wind project takes between \$80-100 million out of your tax pocket in order to ensure they will only take money out of your rate pocket at about 2 - 3 times instead of 2 ½ - 3 ½ times base load rates. If wind companies take the money out of your tax pocket instead of your rate pocket—it's still your money they're taking.

HOW DID SOMETHING SO BAD GET MANDATED INTO MN LAW?

Just like most ideas that are bad for the public, but good for enriching a few people, this involved millions of dollars and dozens of "environmental lobbyists," "industry lobbyist," attorneys, legislators and other elected officials. Many of these people cycle in and out of key State agency jobs. They all repeat the same lie from the same lame script: "Good for the environment, good for rural economies, good for national security, and good for consumers."

In Minnesota's wind energy case, the thought leaders included former Governor Tim Pawlenty, current Lt. Governor Yvonne Prentner-Solon, and our soon-to-be MPUC Chair Ellen Anderson. When the 2007 MN Renewable Energy Standards were enacted, there were less than a dozen 'NO' votes at the MN legislature.

The lobbying and the legal team's parsing of the English language was wildly successful giving MN one of the "strongest" mandates in the nation.

The legal team that wrote the MN law while working at the MN Department of Commerce is the same legal team representing virtually every wind project in front of the MN PUC. They got paid to write the law; now they get paid to represent the financial beneficiaries of the law they wrote. **It's not illegal – but it is despicable.**

IS WIND AN ELECTRICAL GENERATOR?

MN Renewable Energy Standard mandates 25% "renewable" electrical generation by 2025. MN law calls wind energy an "**electrical generator**", but then it exempts wind energy from most laws regulating electrical generators including:

1. Requirement to show consumers "need" the electrical power.

The MN law calls hydro, wind, solar and a few others "renewable"- they only have to show they are listed in the law. They are "needed" to meet the 25% mandate. They need not show that anyone needs the electrical power they produce. To make it more deceitful, even though hydro is "renewable," the law recognizes good and bad hydro. As a result, MN does not actually count most of the hydro electricity we already use. If we did count it, we would already meet our 25% goal for renewable energy. Of course, counting hydro would remove the lie that we somehow "need" wind energy.

2. Requirement to assess the negative effects on the electrical grid. Exempt. Wind adds sporadic electricity - often at times of low demand. Hot flash anyone?
3. Evaluate negative effects to rate payers. Exempt. So long as a wind project is not WAY more expensive than other wind projects - pass.
4. Environmental evaluation—Exempt. No Environmental Impact Statement (EIS). Wind relies on the much lower standard--Environmental Review—written by staff of the MN Dept of Commerce, Office of Energy Security (OES), using information supplied by the wind company. There is not space here to lay out the breadth and depth of failure in Environmental Reviews.

Wind is an electrical generator only when it is exempt it from electrical generation laws.

IS WIND AGRICULTURAL?

Sales pitch: "Wind energy is farming; harvest the wind."

Reality: MN law exempts wind energy from agricultural land use laws directly and through built in loop holes.

1. The MN Constitution limits agricultural land leases to 21 years. The land leases in the AWA Goodhue wind project are 50 years.
2. MN Law limits the number of prime agricultural acres that can be used per KW electricity produced. Wind violates this law. Exempt.
3. The turbines and collector lines do not meet local zoning ordinances for agricultural land uses in most Counties or Townships other than by exception.

Wind is agricultural so long as you exempt it from agricultural land use laws.

IS WIND TRANSPARENT?

Actual wind turbine electrical generation data and the electrical purchase price agreed to in a Power Purchase Agreement (PPA) have been considered "trade secrets." **Citizens are not allowed to know what we are paying for.**

C-BED (Community Based Energy Development)

Another tariff—paid by Minnesotans—to encourage "locally owned" wind projects whose revenues flow primarily to Minnesotans.

Most of the large wind developers are foreign owned—Italy, Spain, and Portugal. At least the owner of the AWA Goodhue project is American. Texas billionaire T. Boone Pickens currently owns the AWA Goodhue project in its entirety and has since December 2009 when he bought it. If it is built, after construction, they anticipate 1% Minnesota ownership. AWA's corporate business address and primary operations are in Dallas, Texas. It appears AWA has zero employees and no office in MN. The AWA Goodhue project was granted Community Based Energy Development (C-BED) status about one year ago.

C-BED--We 'C' the 'BED' all right. The 'BED' local residents 'C' is a very large 'BED' with environmental lobbyists, business investors, attorneys and elected officials all lying together doing very bad things to citizens.

IS WIND SAFE AND ENVIRONMENTALLY BENEFICIAL?

Standards for siting wind energy projects in MN:

1. Created in 1995 with no public hearing
2. Have no identifiable scientific basis
3. Were written based on Minnesota's experience siting wind projects with companies including Enron and others

You know Enron. Here is information on the Shaokatan project:

StarTrib/November 7, 2008—Greg Jaunich, a Minnesota wind-energy pioneer, was sentenced to 21 months in federal prison Thursday for overcharging Xcel Energy Inc. and the state by a half-million dollars for wind-generated electricity from a southwestern Minnesota wind farm in 2003-04. ...Locals in southwestern Minnesota [also] blame him for violating the spirit of a 1990s law that was intended to exempt from property taxes small projects of as much as 2 megawatts that are owned by local farmers and others.

In response to the Minnesota local-ownership law, Jaunich and other out-of-area investors erected more than 30 turbines in one project around 2000 that produced more than 30 megawatts of power. But the project was structured as 15 separate legal entities that would qualify for the state subsidy.

Setbacks

The State standards allow a 500-foot turbine to be located 250 feet from a public road way or a barn. They allow placement as close as 750 feet from a home, which is about half of the turbine manufacturers' minimum setback requirement from any structure. The additional MN noise standards tend to push this to 1250 feet.

Noise

The MPUC requested that the MN Dept of Health evaluate the effects of wind turbines on human health. The report completed in 2009 confirms that sleep disturbance is a common complaint for people living within 2 miles of industrial wind AND that problems are reported less often for homes farther than ½ mile. The report recommends that the State measure and evaluate low frequency sound. It is now 2011. This has not happened yet.

Birds

The AWA Goodhue project area has one of the highest concentrations of raptors in the State, including Bald Eagles. The project is also along the Mississippi River flyway for migratory birds. One of the AWA Goodhue avian studies recommends cutting down all the raptor nesting trees within ¼ mile of turbines. That way the

birds will move away and lower their risk of colliding with turbine blades. The Paynesville Wind avian plan is to count the dead Trumpeter Swans afterwards.

Electrical

There are induced electrical sources which may cause problems:

1. Induced voltage from turbine lines can render copper communications lines unusable. When the turbine produces electricity, your phone service will fail if the turbine lines parallel your copper phone lines. Many (most?) phone lines in rural MN are copper.
2. Induced turbine shaft voltages of 1200 volts and 60 amps going to ground.
3. Turbine collector lines can induce voltage on parallel existing electrical distribution system neutral and farm neutral.

Reception

There is often a loss of television reception in the project area. People living in the Bent Tree project in southern MN can attest to this.

Emergency Rescue

Citizens were told air helicopter medical evacuation will be unchanged - the helicopters simply stay 300 feet or higher above the turbines. We have trouble envisioning how the accident victim on the ground gets into the helicopter.

Turbine Failure, Fire and Ice

It is well documented that industrial wind turbines have occasional problems including fire, falling over, failure of the braking system designed to stop the blades, and ice chunks flying off the blades during icing conditions. When citizens raise these concerns, wind project owners, the environmental lobbyists, state officials and turbine manufacturers deny the problem, ignore the question, throw out diversionary studies that don't apply OR provide new 'happy-speak' terminology to make you feel better when talking about catastrophe.

The MN Office of Energy Security tells us we should not worry about **ice** because there are on average only 2 icing days per year in our area of MN. A wind company representative told citizens in a public meeting that when ice falls off a turbine blade; it falls straight down to the ground. Apparently, wind turbines defy centrifugal force.

Breaking failure is when the turbine spins out of control and self destructs spewing turbine chunks in all directions. This is called "uncontrolled operation".

GE recently announced their 2010 corporate federal tax was zero. GE sheltered part of their income under wind turbines. A GE thought leader, in a letter to the MPUC last December, provided a new term to describe when a 145-foot long blade detaches from the turbine and sails off. **This event is called—“component liberation.”**

Dancing into the Future of Wind Energy

As long as federal and state legislators
continue to shove tax and rate money
into the collective G-Strings of these wind turbine pole dancers,
they will continue to erect turbine poles.