Steven Deslauriers - Submitted along with testimony
2889 Wayside Road Representing the Town of Holland
Green leaf, WI 54126
Treesfolgmail.com
Brown County Resolutions

RESOLUTION REGARDING: HEALTH RISKS POSED BY WIND TURBINES

TO THE HONORABLE CHAIRMAN AND MEMBERS OF THE BROWN COUNTY BOARD OF SUPERVISORS

Ladies and Gentlemen:

No. 9e --

WHEREAS, Brown County has established a Board of Health pursuant to Wis. Stats. §251.03; and

WHEREAS, Wisconsin Statutes give the Board of Health responsibilities to: "Develop policy and provide leadership that fosters local involvement and commitment, that emphasizes public health needs . . ." and to ". . .assure that measures are taken to provide an environment in which individuals can be healthy" Wis. Stats. §251.04 (6)(b) and §251.04 (7); and

WHEREAS, the Board of Health met on May 25, June 8 and June 15, 2010 to collect and consider information from various sources including the following:

- 1) Statement on health and safety of existing installations from Invenergy, LLC (Sponsor of Ledgewind project proposed for rural Brown County);
- 2) A review of available literature on health concerns associated with Wind Turbines presented by the Wisconsin Department of Health Services;
- 3) The proposed regulations (5/17/10 Draft) of Chapter PSC 128, the Wind Siting Rules presently being considered by the Public Service Commission of Wisconsin;
- 4) Various studies from throughout the world on the health effects of wind turbines and guidelines from the World Health Organization;
 - 5) Statements from Brown County Citizens for Responsible Wind Energy;
- 6) Presentations from Bill Hafs, Director of the Brown County Land Conservation Department and Kristin Morehouse, P.E. from Brown County Citizens for Responsible Wind Energy on the contamination threat construction of wind turbines and installation of necessary underground cables pose to the well water consumed by residents in rural areas of Brown County where the bedrock has Karst features; and

WHEREAS, the Board of Health has identified issues of concern for the health of Brown County residents including noise from wind turbines causing health problems for persons in occupied structures and a concern installation of wind turbine systems may result in well water contamination where Karst features in the bedrock are conduits for surface water run off; and

WHEREAS, the Board of Health has made recommendations to the Board of Supervisors it believes are important to the health of county residents.

NOW, THEREFORE, BE IT RESOLVED that the Brown County Board of Supervisors does hereby adopt the recommendations of the Board of Health as follows:

- 1) Wind turbines should be placed such that sound outside of any occupied structure be measured at no greater than 40 decibels at night;
- 2) Required set back placements should be a minimum of 2,640 to 3,168 feet from an occupied structure;

- Wind turbines should not be installed in areas of southern Brown County where Karst features in the bedrock have been identified because of the contamination threat posed to the residents' drinking water supply;
- 4) The Board of Supervisors recommends no wind turbines be constructed in unincorporated areas of Brown County until Chapter PSC 128 Wind Siting Rules are enacted and in force.
- ** Request that the Public Service Commission delays approving the PSCW wind siting standards until all epidemiological studies of health complaints from Wisconsin current wind farms are thoroughly completed.
- ** Add paragraph 5 as per the County Board on 7/21/2010

BE IT FURTHER RESOLVED that copies of this resolution be forwarded to Brown County representatives serving in the Wisconsin Legislature and the Public Service Commission of Wisconsin.

Respectfully submitted, BROWN COUNTY BOARD OF HEALTH HUMAN SERVICES COMMITTEE

A motion was made by Supervisor Vander Leest and seconded by Supervisor Andrews "to adopt".

A motion was made by Supervisor Van Vonderen and seconded by Supervisor Dantinne "to add item #5 on page 3 of the resolution as follows: 'Request that the Public Service Commission delays approving the PSCW Wind siting standards until all epidemiological studies of health complaints from Wisconsin current wind farms are thoroughly completed'." Voice vote taken. Motion carried unanimously with no abstentions.

A motion was made by Supervisor Moynihan and seconded by Supervisor Kaster "to adopt the resolution as amended". Voice vote taken. Motion carried unanimously with no abstentions.

Approved by:	lel	Tom Hinz, County Executive	Date: 7/29/2010
ADDIOVED DV.	151	10111 I IIIIZ, COUITTY EXECUTIVE	Date. 1/23/2010

No. 9f -- RESOLUTION REGARDING: REQUESTING THAT THE PUBLIC SERVICE
COMMISSION OF WISCONSIN INCLUDE CONSIDERING THE IMPACT ON
GROUNDWATER DUE TO CONSTRUCTION IN KARST REGIONS OF
BROWN COUNTY AS PART OF THEIR REVIEW OF THE LEDGE WIND
ENERGY, LLC, (INVENERGY) WIND ENERGY PROJECT APPLICATION.

TO THE HONORABLE CHAIRMAN AND MEMBERS OF THE BROWN COUNTY BOARD OF SUPERVISORS

Ladies and Gentlemen:

WHEREAS, Invenergy has submitted an application to the Public Service Commission (PSC) to install 100 wind turbines as part of a wind energy project in southern Brown County; and

WHEREAS, southern Brown County includes areas of Karst features along the Niagara Escarpment; and

WHEREAS, Karst features are geological features that can act as direct conduits for pollutants to enter groundwater, wells, springs, and streams; and

WHEREAS, the University of Wisconsin Green Bay and Brown County Land and Water Conservation Department have mapped and field verified over 100 Karst features in the Town of Morrison; and

WHEREAS, areas of southern Brown County have experienced serious groundwater contamination problems caused by land application of waste near Karst features that resulted in over 100 wells contaminated by bacteria, E-coli, and nitrates from 2005 to 2010; and

WHEREAS, over 30 percent of nearly 300 wells tested in the Town of Morrison by the University of Wisconsin Stevens Point Center for Watershed Studies (2005 and 2006) and the University of Wisconsin Green Bay in 2009 were over the drinking water standard of 10 parts per million of nitrates; and

WHEREAS, the installation of footings, access roads, and cables buried four feet deep for 100 wind energy turbines are likely to intersect Karst bedrock features and potentially create additional conduits for pollutants to groundwater; and

WHEREAS, land application of animal wastes and other wastes including industrial wastes, septic wastes, and municipal wastes near conduits to groundwater increases the risk of groundwater contamination and risks to public health.

NOW, THEREFORE, BE IT RESOLVED that the Brown County Board of Supervisors respectfully requests that the Public Service Commission of Wisconsin review the Invenergy application for the wind farm in Brown County and require that Invenergy use proper engineering construction methods around wind turbine footings, access roads, and buried power cables to prevent additional conduits of groundwater from being created; and

BE IT FURTHER RESOLVED THAT the Brown County Board of Supervisors respectfully requests that the Public Service Commission require Invenergy to communicate and provide information regarding the specific location of all Karst features encountered during construction for the proposed wind energy project to the Brown County Land and Water Conservation Department and the Wisconsin Department of Natural Resources (DNR) to help regulate the land application of animal wastes by the Brown County Land and Water Conservation Department and industrial, septic, and municipal wastes by the DNR; and

BE IT FURTHER RESOLVED THAT Brown County respectfully requests that the Public Service Commission require Invenergy to provide funds for a Brown County staff person to be hired to work with Invenergy and residents in the wind farm region during the construction phase of the project regarding location and identification of Karst features; and

BE IT FURTHER RESOLVED THAT this staff person will continue to work in the wind energy project area, throughout the lifespan of the project, with land application of animal waste setbacks, nutrient management, and coordination of other land application of industrial wastes, municipal wastes, and septic wastes with the DNR to prevent future groundwater contamination problems.

Respectfully submitted,
LAND CONSERVATION SUBCOMMITTEE
PLANNING, DEVELOPMENT &
TRANSPORTATION COMMITTEE

A motion was made by Supervisor Clancy and seconded by Supervisor Kaster "to adopt". Voice vote taken. Motion carried unanimously with no abstentions.

Approved by: \s\ Tom Hinz, County Executive Date: 7/29/2010

No. 9g -- <u>RESOLUTION REGARDING: PLACING ADVISORY REFERENDUM</u> QUESTION ON NOVEMBER BALLOT

TO THE HONORABLE CHAIRMAN AND MEMBERS OF THE BROWN COUNTY BOARD OF SUPERVISORS

Ladies and Gentlemen:

WHEREAS, according to the Legislative Fiscal Bureau, over the past decade, the state of Wisconsin has transferred approximately \$1.2 billion from the state's segregated transportation fund to the state's general fund and replaced it with approximately \$800 million in General Obligation (GO) bonds, thereby reducing the amount available for transportation purposes by approximately \$400 million; and

WHEREAS, Wisconsin's practice of transferring money from the segregated transportation fund to the general fund has eroded the public's confidence that the "user fees" they pay through the state gasoline tax and vehicle registration fees will be used for their intended purpose; and

WHEREAS, Wisconsin's practice of replacing the dollars transferred from the state's segregated transportation fund with GO bonds puts our state in the precarious position of bonding to fund ongoing operations; and

WHEREAS, the Pew Center on the States recently released a report that included Wisconsin as having one of the ten worst budget situations in the country and specifically cited transferring money from the transportation fund to fund ongoing operations as an example of one of the practices that has put Wisconsin in such an untenable position; and

WHEREAS, the debt service for these bonds will have to be paid for out of the state's general fund which hinders its ability to fund other programs like Shared Revenue, Youth Aids, Community Aids and courts in the future; and

WHEREAS, using the states general obligation (GO) bonds in this way has hurt the state's bond rating, and a report issued by CNN in 2009 listed Wisconsin as having the second worst GO bond rating in the country; and

October 13, 2010

Committee on Commerce, Utilities, Energy, and Rail 411 South State Capital Madison Wisconsin

My name is Jim Mueller. I have been living in the Town of Marshfield since 1962. I came here to speak in regards of the new rules for the siting of wind turbines.

We have been living with turbines in our neighborhood for nearly two years. The noise at times is like a jet engine roaring above your house. Nighttime is the worst. Air is heavier and noise comes to the ground. We are awakened at night and even with windows closed the noise will come thru the walls. This goes on for 4 to 6 hours an evening. I have gone to the basement to try and get away from the noise.

A train will make noise for 10 to 20 minutes when passing through, airports quiet down later in evenings as flights lessen. In our area as the night goes on the noise get louder. We should have a right to have a night's sleep like anyone else.

Noise limits proposed are 50 dBA during daylight and 45 dBA at night. Sounds realistic but need to understand how tested is done and what this truly is. If a complaint is received the wind turbine companies have up to 2 years, up to 2 years, up to 2 years to do an accurate test to see if noise is within compliance. The owners of the turbines can pick a time and control the turbines during testing to make sure they comply during the test. If the turbines are compliant during this test there is nothing we as citizens can do. Why are such rules being made that cannot be enforced. Who is going to enforce this? How can such noise limits even be enforced? What kind of a joke is this?

Last Saturday night there was no wind but the wind turbines where turning and grinding trying to find wind. That noise is almost as loud as when the wind is blowing. Wind Turbines do not produce electricity until wind speeds reach 8 miles an hour. Now we are awake at night by the turbines and they are not even producing electricity!

The wind turbines distort the digital and analog signals for television and radio. We no longer can get television off our antennas. Public television and many other digital stations are not on cable. We can no longer watch shows we were able to watch before the turbines were constructed. My wife has a problem with motion sickness. The

flickering caused by the turbines is nauseating for her. The property values of our homes are less because people do not want to live in our area.

With all the problems we are having in our township a citizens wind turbine standing committee was formed to try and resolve these problems. I am on this committee. The only problems that We Energies has attempted to resolve are TV and radio and this has been a battle. The only reason We Energies is working on this is because they have to. It is in the joint development agreement contract between We Energies and the Town of Marshfield.

Each month We Energies is to give our committee a report on complaints regarding the wind turbines. We Energies has been giving only a partial list of complaints in the last several months. In September even one of our town supervisors called about the noise of one of the turbines. This was not listed on the report.

There was a turbine that whistled like an old time police siren. Residents were complaining. We Energies determined that it was not a health hazard and kept the turbine running for 6 months. Who gives We Energies the right to determine what amount of whistle or screeching that is allowed?

How can our citizens compare to a company that has a complete legal department on staff? Who can afford to hire legal counsel that can represent us? And to top this off our township is not included in the revised rules due to the wind turbines being constructed before these hearings. Who is going to help us with our current problems?

I have suggested not having the wind turbines turning until wind speeds reach 6 miles an hour. The technology is available. This would give us some temporary relief as follows:

- 1. Eliminate Flicker.
- 2. Eliminate noise from the wind turbines operating.
- 3. Eliminate TV and Radio reception problems.
- 4. Lower wear and tear on the mechanics of the turbines.
- 5. For summertime activities especially. Having a quiet day is like a little bit piece of heaven. You don't realize what you had until it is taken away.

We are pleading for this committee to not only change some of these proposed rules, but to also include our township in these rules. I am not against wind energy, it just does not belong where people reside.

James Mueller N8710 Pine Road St. Cloud WI 53079 Phone 920-753-5211

Date	City / Village	Question/Concern/Notes	Follow-up completed (date)	Notes:
9/16/10	Mt. Calvary	Customer called with questions about service agreement he received in mail regarding television service.	Bob Servais spoke with customer and answered all questions.	
	·		Dale called & received voicemail; R Servais got in touch with her on 9/18 and	
9/18/10	Mt Calvary	Customer called with questions about DISH. Customer called with questions about service agreement he received in mail regarding television	answered all questions Bob Servais spoke with customer and answered all	
9/21/10	Malone	service.	questions. Testing has showed no	
	•		interference. Another test is planned. If no significant interference is found we may upgrade the antenna.	
9/23/10	Mt Calvary	Customer is having television interference every day, especially bad on weekends. Customer called for help with TV Interference. He recently cancelled his DirecTV account and when his antenna did not work called a local Antenna	our response.	
9/30/10	Malone	Company only to find out that his line-of-sight is cutting out Local broadcast.	Bob Servais following up with customer.	

Thomas Tanton



Mr. Tanton is President of T² & Associates, a firm providing consulting services to the energy and technology industries. T² & Associates are active primarily in the area of renewable energy and interconnected infrastructures, analyzing and providing advice on their impacts on energy prices, environmental quality and regional economic development. Mr. Tanton has 40 years direct and responsible experience in energy technology and legislative interface, having been central to many of the critical legislative changes that enable technology choice and economic development at the state and federal level. Mr. Tanton is a strong proponent of free market environmentalism and consumer choice, and frequently publishes and speaks against alarmist and reactionary policies and government failures.

As the General Manager at EPRI, from 2000 to 2003, Mr. Tanton was responsible for the overall management and direction of collaborative research and development programs in electric generation technologies, integrating technology, market infrastructure, and public policy. From 2003 through 2007, Mr. Tanton was Senior Fellow and Vice President of the Houston based Institute for Energy Research. Mr. Tanton was also a Senior Fellow in Energy Studies with the Pacific Research Institute until 2010. Until 2000, Mr. Tanton was the Principal Policy Advisor with the California Energy Commission (CEC) in Sacramento, California. He began his career there in 1976. He developed and implemented policies and legislation on energy issues of importance to California, and U.S. and International markets, including electric restructuring, gasoline and natural gas supply and pricing, energy facility siting and permitting, environmental issues, power plant siting, technology development, and transportation. Mr. Tanton completed the first assessment of environmental externalities used in regulatory settings. Mr. Tanton held primary responsibility for comparative economic analysis, environmental assessment of new technologies, and the evaluation of alternatives under state and federal environmental law. Mr. Tanton served as Guest Lecturer for the Master in Environmental Science program at California State University Sacramento (CSUS), lecturing on power plant and electric grid technologies and their comparative environmental impacts.

Main Concerns with Wind Energy Development Tom Tanton 10/6/2010

Wind energy is primarily built for tax purposes

During the past decade, the wind and other renewable energy industries have been incredibly successful in getting federal and state government officials to grant them generous tax breaks and subsidies, including state Renewable Portfolio Standards. The wind industry, which has received nearly \$4.5 billion in "stimulus" program cash grants during the past year from the Obama Administration, apparently has plenty of cash to finance its intense lobbying. Most of that money actually ended up overseas. Wind energy is subsidized 20-30 TIMES conventional sources per unit of production. Even so, it is not economically competitive, and utilities that are forced to produce or buy electricity from renewable energy facilities pass along the higher costs to their customers via their monthly bills.

Wind energy does not offset any petroleum or petroleum imports

A persistent myth is that increasing wind- and solar-generated electricity will reduce our dependence on foreign oil and thus boost our energy security. Less than 1% of our electricity is generated using petroleum, so any renewable generation will have no appreciable effect on petroleum demand.

Wind energy can easily INCREASE emissions of greenhouse gasses

As shown in several recent engineering studies the volatility (short term fluctuations in output on the order of minutes due to gusty winds) forces other power plants connected to the grid to operate in "mirroring" mode ramping quickly up and down. Just like your car in stop and go traffic, as opposed to thoroughfare speed, this drastically reduces those plants efficiency, leading to increased fuel consumption and GHG emissions. Only by sophisticated "dispatch" modeling of an individual grid along with wind data can it be determined whether, on net, fuel use and GHG emissions increase or decrease. To date, no wind developer have ever done such a modeling effort subject to peer or regulatory review.

Wind energy is a threat to wildlife and endangered species

Wind resource areas often are coincident with critical habitat and/or migratory flyways. Many of these conflicts are for protected, threatened and endangered species. Wind energy development has long had significant issues with avian and bat mortality, even given the relatively few wind turbines installed to date. More wind turbines will pose greater threats. For example, in California's Altamont Pass area, one of the nation's oldest development area, over 500 Golden Eagles are slaughtered each year. Further, the additional transmission lines necessary to serve wind developments pose special threats as well.

Living too close to wind turbines imposes health and safety risks to the public

The tip speed of modern wind turbines approaches 200 MPH when operating. Ice and blade throw, from the top of a 300 foot tower, while infrequent, poses serious safety risks to the public within about ³/₄ to a mile. Further, the noise from wind turbines can cause health effects, as documented by Dr. Nina Pierpont and others. Industrial wind turbines produce significant amounts of audible and low-frequency noise. Dr. Oguz A. Soysal, Professor and Chairman of the Dept. of Physics and Engineering at Frostburg State University in Maryland, measured sound levels over half a mile away from the Meyersdale, PA, 20-turbine wind farm. Typical audible (A-weighted) dB (decibel) levels were in the 50-60 range, and audible plus low-frequency (C-weighted) dB were in the 65-70 range. 65-70 dB is the loudness of a washing machine, vacuum

cleaner, or hair dryer. A difference of 10 dB between A and C weighting represents a significant amount of low-frequency sound by World Health Organization standards. The noise produced by wind turbines has a thumping, pulsing character, especially at night, when it is more audible. The noise is louder at night because of the contrast between the still, cool air at ground level and the steady stream of wind at the level of the turbine hubs. This nighttime noise travels a long distance. It has been documented to be disturbing to residents 1.2 miles away from wind turbines in regular rolling terrain, and 1.5 miles away in Appalachian valleys. At night, the World Health Organization (WHO) recommends, the level of continuous noise at the outside a dwelling should be 45 dB or less, and inside, 30 dB or less. These thresholds should be even lower if there is a significant low-frequency component to the sound, — as there is for wind turbines. Higher levels of noise disturb sleep and produce a host of effects on health, well-being, and productivity. Effects of noise-induced sleep disturbance include fatigue, depressed mood or well-being, decreased performance, and increased use of sedatives or sleeping pills. Measured physiologic effects of noise during sleep are increased blood pressure and heart rate, changes in breathing pattern, and cardiac arrhythmias.

The decibel is logarithmic. Increasing the dB level by 10 multiplies the sound pressure level by 10. Increasing the dB level by 20 multiplies the sound pressure level by 100 (and 30 dB multiplies by 1000, etc.). Thus the 65 dB measured day and night half a mile from the Meyersdale wind farm, for example, has a measured intensity 100 times greater than the loudest continuous outdoor nighttime noise (45 dB) recommended by the WHO.

I wish to thank the Senate Energy Committee for the opportunity to speak today.

I am a retired Green Bay Public school teacher. I earned my first degree here at UW - Madison in Natural Science with an emphasis in Biology.

This past summer, my husband, Carl, and I attended five of the Wind Siting Council meetings. As an observer, I could hear the back and forth discussions, including comments by the pro-wind members who have a vested interest in promoting and ensuring the construction of turbine projects. This makeup of the Council presented problems when trying to read and consider various documents and take an unbiased look at reported health and safety problems. On occasion, I was surprised at the blatent disregard for the current and potential problems reported by wind project residents. For example, Bill Rakocy stated at one of the early meetings quite abruptley, "Yeah... we can talk about human health issues, but it better be real illnesses, not those fake ones you hear about and are hard to prove."

Our Brown County Board of Health concluded, after seeing an epidemiological study of the changes in the blood cortisol levels, etc. in a resident in one of the wind projects after the turbines went online, that siting distance may be the cause of these problems. They listened to other residents testimomies who were dealing with shadow flicker, low frequency noise from the moving blades, interrupted sleep, etc. The gut-wrenching story of the Wirtz family who eventually had to walk away from their \$320,000 farm due to sleeping problems, as well as lesions in the GI system of their teenage daughter, gave credence to their claims.

Our Brown Board of Health saw these symptoms as "real". The neighboring Kewaunee County Board of Health drew the same conclusion, as did the Manitowoc County Board of Health most recently.

At one of our Brown County Board meetings in early 2010, it was announced by one of the supervisors that the city of Green Bay had hired an acoustical engineer and his firm to do c-weighted tests to measure and assess the Low Frequency Noise produced by the blades of industrial fans, the airport and the cooling systems at the mega-grocery stores.

The city government wanted to see if the LFN's might be making some city residents sick who live nearby. And, if needed, they would rewrite their city noise ordinance to include new safe standards to include LFN's and protect their urban residents.

Doesn't it make sense to have acoustical testing and sleep studies done in current Wisconsin industrial wind projects? Don't we as rural residents deserve the same safeguards for our families and farms?

Last week, I spoke with Mr. Tom Tanton, who is an energy analyst and former member of the California Energy Board for 35 years. He is President of T2 & Associates providing consulting services to the energy and technology industries.

He got right to the point in his e-mail to me. Quote: "Living too close to wind turbines imposes health and safety risks to the public. ... noise from wind turbines can cause health effects, as documented by Dr. Nina Pierpont and others. Dr. Oguz A. Soysal, Professor and Chairman of the Dept. of Physics and Engineering at Frostburg State University in Maryland measured sound levels over half a mile away from the Meyersdale, PA, 20-turbine wind farm. ... audible plus low frequency cweighted dB were 65-70 range. .. represents a significant amount of low frequency sound by World Health Organization standards. Noise-induced sleep disturbances can result in fatigue, depressed mood or well-being, decreased performance. ..increased blood pressure and heart rate, changes in breathing pattern, and cardiac arrhythmias.

As for the impacts on wildlife, I have lived on the Niagara Escarpment or the Ledge for 33 years. This feature is one of the most important flyways into Canada for migrating species. By state and Federal law, you and I are prohibited from having in our possession even one feather from a raptor -- a hawk, owl or eagle feather much less kill one of these birds. The penalty is a substantial fine or jail time.

By allowing wind turbine developers to put up giant modern wind turbines on the ledge escarpment without a "required" bird and bat study prior to construction with the state DNR's oversight of the process, you open the door to a potential wildlife catastrophe for certain species. A DNR wildlife biologist who is assigned to a specific wind project can only "request" that pre- and post-construction bird and bat

studies be done. A recent study of three newer Wisconsin wind projects indicated kill numbers of bats that ranked ten times the national average and second highest kill rate in all of North America.

Have you all been listening? These are only some of the "red flags" that have popped up in Wisconsin wind project areas. There is not enough time to talk about our overwhelmed electrical grid system and the effect of pulsating non-linear power produced by these huge wind turbines known to create ground currents, sometimes called "stray voltage" by the utilities, that can travel into homes and barns through wiring and/or the plumbing.

The time for studies is now, rather than to blindly proceed with a public policy that could harm the people and wildlife resources of Wisconsin.

Thank you for your time. Sandra L. Johnson 1893 Wayside Rd. Greenleaf, WI 54126 Below are some excerpts from a 2004 report by Energy Center of Wisconsin, Madison WI, titled: A Study of Wind Energy Development in Wisconsin. The report was prepared for the State of Wisconsin, Department of Administration, Division of Energy. The report contains a case study of the 5 wind projects that existed in Wisconsin at the time of the report, and what can be learned from these projects to further support the construction and operation of additional wind projects in Wisconsin. Michael Vickerman is listed as a contributing author for the report.

Some of the conclusions of the report are;

- The project must be acceptable to the people in the area.
- Proper turbine placement is crucial to success.
- Eastern Wisconsin has smaller farms and higher rural population density making it less suitable for successful wind projects.

The repeating conclusion from every project is that people living less than ½ mile from turbines will be negatively impacted by the turbines.

The entire report can be downloaded from www.ecw.org

Report excerpts start here;

Executive Summary CONCLUSIONS

Developing sustainable sources of energy for the future requires a broad understanding of these technologies within their working context. This does not simply mean a demonstration of their mechanical integrity, their economic feasibility, or an analysis of their impact on the natural environment, but also attention to how their presence affects existing social and economic structures. For a clean energy technology to be sustainable, it must be acceptable to the majority of people, and particularly to those who live near it.

There are many economic viewpoints involved in the average wind farm development. As indicated in Part 1 of this Study, Wind Power in Wisconsin: A Development Case Study, wind farm development in Wisconsin has shown that deeply rural communities, where the local economy is based in agriculture, are more receptive to wind farms because they are perceived as an economic boon. This is particularly true when local government shares in the revenues. On the other hand, for subrural residential housing developments whose economic base is primarily elsewhere, wind farms are often considered a visual blot on the bucolic landscape.

Potential Remedies

One of the themes we discovered in this research is the need to pay more attention to the turbine site selection in general, and to the proximity of adjacent but non-involved landowners in particular.

Rosiere project, 17 Vestas 660-kW V47 turbines

MGE also recognized that the exact placement of turbines in relation to nearby residences is of vital importance. They were aware of the need to pay careful attention to these. Too much residential development is seen as carrying with it a high risk of significant local opposition.

The landowners do notice some of the characteristics others have criticized such as blade flicker (the effect caused by sunlight shining through the moving turbine blades) and turbine noise, but they are willing to live with them. They are also aware that the initial opposition to the MGE Rosiere and WPS Lincoln wind farms continues, and they expressed regret that the projects cause tensions between some people in the town.

In general, the landowners feel the compensation they are receiving from MGE for the leased land is adequate. These landowners advise other people who may be considering putting turbines on their land to proceed cautiously, do research by talking to people who already have turbines on their land or live near them, and to make sure that they will be well compensated by the utilities or developers involved.

Some project opponents said they think wind turbines are unsightly and that they detract from enjoying the rural landscape. Others expressed the view that they would prefer to see more residential development in the township and thought that the wind farms would discourage people from building homes in the area. They felt that in terms of maintaining the property tax base and the livability of the area, they preferred to see residential development rather than wind farm development." With regard to turbine noise and blade flicker, the opponents expressed the view that these were very objectionable effects that had a significantly detrimental effect on their quality of life.

Another common theme voiced by the opposition to the projects in Kewaunee County is that the projects were forced on the town by powerful corporate and state government interests, and that the local opposition did not have the resources of time or money to enable them to fight back. Another common opinion among those opposed is that the wind farms are a benefit to the landowners who host the turbines, but not to the average resident of the town, and especially not to the immediate neighbors of the landowners. There was also a tendency to question utility funded studies about such issues as turbine noise and a belief that these studies were inherently biased.

Among the lessons learned by MGE as a result of the Rosiere wind farm project would be the importance of specific turbine sitting considerations, especially when residences are nearby. They recognized the need to anticipate turbine noise and blade flicker, which are much easier to deal with in the project planning stage than after construction. MGE benefited from the use of a local agent to facilitate discussions with local property owners. In addition, MGE itself designed the layout of the wind farm. Even though the scattered turbine layout may not be the most economically efficient design, MGE presumably arranged the turbines in a way to minimize local impact while maximizing capture of the wind resource.

Another lesson learned is that the people most likely to complain about a wind farm are the people who live close enough to it to experience negative effects, but who are not directly sharing in the revenue. While the landowners hosting the wind turbines notice the same effects, the financial compensation they are receiving as a result of the wind farm seems to make the effects much easier to ignore.

Potential Remedies

The obvious remedy for some of the sitting problems would be to spend more time in the design phase of the project looking at the potential for problems with noise, blade flicker, and disruption of TV reception. Another possible remedy would be to increase the minimum setback distance between a wind turbine and nearby residences not receiving direct compensation from the project.

LINCOLN, 14 Vestas 660-kW V47 turbines

The most extreme dissatisfaction came from a number of people living near the Lincoln wind farm. This group complained so persistently after the wind farm was built that WPS was compelled to make purchase offers on their properties so they could relocate. WPS extended offers to six nearby neighbors, and two of them accepted. The two houses in question were demolished, and future residential development on those lots is banned in order to avoid similar problems in the future. The primary complaint in these cases was noise, although poor TV reception and blade flicker were also reported to a lesser extent.

The most controversial issue brought up in relation to the wind farm in Kewaunee County is probably "stray voltage." The term is commonly used to refer to small voltage differences existing between different parts of a building where they normally would not occur. It can be a problem on dairy farms because cows are sensitive to small voltage differences. If a voltage difference exists between a feeding trough and the floor, the cows could feel the current and be discouraged from eating. This effect has been studied for some time in Wisconsin. It has frequently been identified as the result of faulty ground wiring practices at the site that can be corrected by making changes to the wiring of the building in question. The cause is not always discernable, however, leaving the issue of stray voltage open to controversy.

The issue of noticeable turbine noise at low (9 mile-per-hour) wind speeds emerged at the Lincoln wind farm, just as it did at Rosiere.

Some of the nearby neighbors also reported poor TV reception at the Lincoln facility.

Lessons Learned

The most obvious lessons learned from the WPS Lincoln project mirror those of the MGE Rosiere project. Of primary importance is sitting turbines with careful regard for nearby rural residences. Recommended practices include scattering rather than concentrating turbines in the landscape, maintaining sensitivity to the density of rural residences, and addressing the issue of compensation for the wind farm's immediate neighbors who are not hosting a turbine.

The Township of Lincoln Wind Turbine Moratorium Study Committee

[Responses included various objections to issues such as the aesthetics of the turbines, worries about stray voltage, and increased automobile traffic in the area.]

There was little statistical variation among either positive or negative opinions expressed by residents close to either wind farm. The two wind farms seemed to have had, on average, the same effect on the nearby residents.

What did emerge was a pattern showing that the most consistent indicator of whether a respondent was likely to have positive or negative feelings about the wind farms was the distance of his or her residence from the wind turbines. Respondents were grouped by distance from the turbines in the following categories: 800 feet to 1/4 mile, 1/4 mile to 1/2 mile, 1/2 mile to 1 mile, 1 mile to 2 miles, and over 2 miles. The group that had the most consistently negative feelings about the wind farms, and reported the most problems with issues such as noise and blade flicker, were those who lived between 1/4 mile and 1/2 mile away from the turbines. In fact, this group reported even more problems with these issues than did those who actually lived between 800 feet and 1/4 mile away from the turbines.

It is possible that those who live between 800 feet and 1/4 mile away would tend to be the landowners hosting the turbines, and those living between 1/4 mile and 1/2 mile away would tend to be their immediate rural residential neighbors. As mentioned in the summaries of Stakeholder Perspectives above, direct financial compensation has been shown to influence an individual's willingness to accept turbine noise, blade flicker and blinking red lights. Landowners hosting turbines do notice these effects, but they are less likely to object than are their uncompensated, immediate neighbors. Beyond one mile from the turbines, the number of negative responses generally drops off quickly.

MONTFORT, 20 GE 1.5 MW turbines

Development Strategies

As evidenced by the quick permitting process, Montfort is a textbook example of how large wind farm development can be done right in Wisconsin. It is commonly believed that Montfort's success is due primarily to its demographics. With some of the best soil in the county, agriculture remains strong in the township and there are no new rural subdivisions in the

immediate view shed of the project. Farm sizes in Iowa County are substantially larger than in eastern Wisconsin, and population density is very low. Development pressure in the area is slight and is confined to the eastern fringe of the county and to the fringes of its two largest cities, Dodgeville and Mineral Point.

The Montfort wind farm is located along Military Ridge, which extends from its eastern terminus in Dane County west into Grant County, and running straight across Eden Township just south of U.S. Highway 18. Elevations along the Military Ridge are much lower relative to the surrounding area than along the Niagara Escarpment in eastern Wisconsin. Current wind monitoring data confirm a less energetic wind resource in this area when compared with locations on top of the Niagara Escarpment in eastern Wisconsin. However, the land along the project site is relatively flat, open, and treeless, and more accommodating to larger clusters of wind turbines than the more heavily populated east.

TURBINE PLACEMENT

The first generation of wind power projects in Wisconsin (particularly in Kewaunee County) showed that unless developers pay attention to the placement of turbines, noise and blade flicker could become significant issues for nearby residences. The importance of turbine placement and wind farm design cannot be overemphasized.

REPORT Conclusions

ADJACENT PROPERTY OWNER CONCERNS

Developers should place a higher priority on finding ways to placate non-host neighbors. Some of the loudest opponents to the Addison project were farmers in the project area who, for one reason or another, were not hosting wind turbines. Rancor among neighboring farm households can play into the hands of opposition leaders, who can exploit these divisions to undermine political support for wind power. If the farmer's nonparticipation is a result of a physical consideration (low lying land, setback problems, etc.), developers ought to consider compensating these individuals in some fashion, especially if they are in a position to influence the outcome of the permitting process.

As previously discussed, developers may want to consider developing a payment plan to compensate adjacent, contiguous non-turbine host landowners and perhaps non-contiguous landowners within a defined radius of the project. Developers should also seriously consider making payments to the local government according to the formula established by Wisconsin Act 31, even if the project is less than 50 MW and therefore not subject to its provisions. This would relieve concerns that non-host landowners and other nearby residents aren't receiving benefits from the project. Presumably, increased revenue to the local government from a turbine project should result in slowing the rise in property tax rates, which is a strong argument in any Wisconsin community.

LOCATION LOCATION

Experience suggests it's easier to situate large clusters of wind turbines in western Wisconsin than in eastern Wisconsin. Even though the wind resource is more energetic along the Niagara Escarpment in the eastern half of the state, sitting turbines is a more delicate process there due to smaller farm sizes and higher population densities. Furthermore, in western Wisconsin local governments tend to be more receptive to farming constituency priorities than in the east, owing in large part to agriculture's importance to the western Wisconsin economy. There is also a higher proportion of farmers serving on local and county boards in that part of the state. Developers would be well advised to consider the tradeoffs between the costs of a simpler permitting process in lower wind resource regions, and the expense of development in a higher wind area with a more difficult, time-consuming and expensive permitting process.

USE APPROPRIATE DEVELOPMENT STRATEGIES

When the research for this report was first started, we assumed the best development strategy is to be as open as possible. This included holding multiple informational meetings, reaching out to people and sharing as much data as possible. Today, our conclusion is very different. FPL tried the first strategy in Addison and it failed. Conversations with other developers confirm that while they initially shared the belief that reaching as many people as possible during the early stages of a project would make the process easier, experience has taught them otherwise. One developer stated that each piece of information presented to the public was twisted and then used against them, and their project was held up for years.

Current wisdom suggests that developers need to identify willing landowners and discussing permitting concerns with local government officials before making a public announcement. This approach allows conversations to develop naturally and calmly and facilitates an orderly exchange of information. In this way, developers can directly address the concerns of landowners and town officials, free from the pressure of potentially emotional public gatherings where non-resident opponents of wind energy may arrive purposely for a confrontation. When developers work quietly to identify local concerns and permitting requirements, the process is greatly improved and the subsequent public hearings can be conducted from a position of knowledge rather than as defense of wind power.

Public Service Commission of Wisconsin (PSC)

Submitted: 7/5/2010 6:02:57 PM

COMMENTS FILED ELECTRONICALLY IN

Wind Siting Rules

1-AC-231

Commentor Information:

Name: Curt Hilgenberg Address: 7312 Holly-Mor Rd

City: Greenleaf State:WI Zip:54126

Comment:

April 16, 2010 by Bentek Energy LLC for the Independent Petroleum Association of Mountain States

Summary:

This new report from Colorado's natural gas industry says increased use of wind energy indirectly results in raised pollution levels produced by some coal-fired power plants along the Front Range. The report recommends curbing the use of wind energy during the next one or two years to levels that match power output at existing natural gas-fired power plants -- and building more natural gas plants in the long term. The introductory sections of the report are provided below. To access the full document click on the link at the bottom of this page.

Introduction

Sometimes things are not what they seem. Nowhere is this more evident than in the realm of state and federal energy policies. In 2004, Colorado became the 17th state to adopt renewable energy standards when voters passed Amendment 37. Colorado reaffirmed its commitment to wind and solar energy in 2007 when the state legislature passed HB 1281, increasing the requirement for utilities to purchase renewable energy by 100%, and by adopting the Climate Action Plan in which renewable energy plays a central role in the state's strategy of reducing "greenhouse gas emissions by 20% below 2005 levels by 2020."1 The expected environmental benefit of these measures is perhaps best summarized in this quote from Environment Colorado:

"Smog and air pollution continue to plague much of Colorado and part of the problem is caused by coal-fired power plants. Requiring a modest 10 percent of our electricity to come from renewable energy sources is equivalent to eliminating the pollution from 600,000 cars per year, thereby reducing smog and easing costly health problems."2

According to advocates, renewable energy will not only be a major tool to reduce our carbon output, but also, by displacing coal and natural gas, renewable energy will reduce smog and other air pollution, presumably by reducing sulfur dioxide (SO2) and nitrous oxides (NOX), principal components of ozone and smog.

This report, sponsored by the Independent Producers Association of Mountain States, concludes that the emissions benefits of renewable energy are not being realized as planned based on examination of four years of Public Service Company of Colorado (PSCO) operational history. Integrating erratic and unpredictable wind resources with established coal and natural gas generation resources requires PSCO to cycle its coal and natural gas-fired plants. 3 Cycling coal plants to accommodate wind generation makes the plants operate inefficiently, which drives up emissions. Moreover, when they are not operated consistently at their designed temperatures, the variability causes problems with the way they interact with their associated emission control technologies, frequently causing erratic emission behavior that can last for several hours before control is regained. Ironically, using wind to a degree that forces utilities to temporarily reduce their coal generation results in greater SO2, NOX and CO2 than would have occurred if less wind energy were generated and coal generation were not impacted.

An analysis of the Electric Reliability Council of Texas (ERCOT), which also operates under a mandate to use renewable energy, validates the emissions findings for PSCO. The underlying problem is the same for both PSCO and ERCOT: the generation capacity of wind resources has become too large relative to the capacity that is available from coal and natural gas facilities. Natural gas-fired combustion turbines and combined-cycle facilities are designed to accommodate cycling. Because gas resources are insufficient to offset all of the wind energy produced in PSCO and ERCOT, coal units must be cycled to counterbalance the amount of wind that cannot be offset by natural gas. As a result, when the wind energy is generated at a high enough rate, PSCO is forced to scale-back generation from its coal-fired resources. But, coal equipment is not built for cycling. Coal boilers are designed to be operated as a base load resource - in other words, to operate at a consistent output level all the time. Cycling causes coal units to operate less efficiently and reduces the effectiveness of the environmental control equipment, substantially increasing emissions.

The results of this study help explain why PSCO's coal-fired plants located in the Denver non-attainment area have experienced an increase in SO2, NOX and CO2Figure I-1 over the past few years. below shows the change in emissions

generated at the plants in proximity to the Denver non-attainment area - Valmont, Arapahoe, Cherokee and Pawnee, and the Comanche plant located outside of Pueblo. Between 2006 and 2009 despite the introduction of over 700 MW of wind energy, all of the Denver area plants except Cherokee show higher levels of SO2, all show higher levels of NOX and all but Pawnee show higher levels of CO2. The Cherokee plant switched to a lower sulfur coal in 2008, thus, even the lower SO2 readings at that plant cannot be attributed to the benefits of wind energy. Furthermore, during the 2006-to-2009 period, generation from the non-attainment area plants fell by over 37%, which makes the increase in emissions even more significant particularly in light of the EPA's announced intent to mandate tighter restrictions on SO2 and NOX emission levels by 2011.

The results also suggest that the problem will worsen over time unless mitigation measures are taken. The emission issues documented in this report are evident because PSCO has approximately 1,100 MW of wind capacity. Under the existing Renewable Portfolio Standard (RPS) and the current Integrated Resource Plan (IRP), wind capacity is anticipated to grow by a minimum of 100 MW annually through 2020. Moreover, the Colorado state legislature recently increased the RPS to 30% of sales by 2020, which will force PSCO to add even more wind capacity to its system. Unless the additional wind capacity is coupled with significantly more gas capacity, a reduction in coal capacity, or a combination of the two, the higher RPS will drive SO2 and NOX and possibly CO2 emissions higher, further exacerbating the ozone non-attainment area problems for the Front Range of Colorado.

There are national implications as well. Congress and the Obama administration are considering a national RPS. Before such a national standard is implemented, there is a compelling need to better understand where intermittent sources of energy such as wind can be integrated with existing nuclear, coal and natural gas capacity without producing cycling-induced emissions problems. The study's findings relative to ERCOT in this respect are not encouraging. ERCOT, which has one of the nation's largest natural gas-fired generation bases, acquires only about 23% of its energy from natural gas between the hours of 12:00 am and 8:00 am. Consequently, when wind comes online in ERCOT during the early morning hours, coal plants are forced to cycle. As cycling of coal plants is problematic in ERCOT, it is very likely that emissions will increase virtually everywhere else unless natural gas-fired generation is added simultaneously with wind.

Report Organization

This report is organized as follows:

- o Chapter II provides an overview of PSCO's generation capacity and utilization, basic data and analysis describing the various utilities and fuel sources that generate power in the state.
- o Chapter III describes why coal plants are cycled, and what happens as a result.
- o Chapter IV examines two specific "wind events," quantifying the emissions and the implications of each, as well as how PSCO handled these events.
- o Chapter V estimates the total incremental emissions that occurred as a result of using wind energy in the PSCO territory for 2008 and 2009.
- o Chapter VI describes the interaction between wind, coal and natural gas in ERCOT, showing how the same dynamics evident in PSCO's territory have emerged as the magnitude of wind generation has grown.
- o Chapter VII examines the emissions implications of one possible mitigation measure: retiring Cherokee and Valmont coal fired plants and replace their generation with power produced from either the existing or new gas-fired facilities.
- o Chapter VIII draws conclusions and suggests several recommendations regarding mitigation measures that might be implemented to improve the impact of wind on the PSCO system.

Data Sources

This report is built on a variety of publicly available primary and secondary data sources. The general descriptive information generally comes from basic Energy Information Administration databases including Forms 860, 861 and 423; the Federal Energy Regulatory Commission Form 1; PSCO documents, including their annual 10K financial report, and other reports available on the PSCO public website.

The core of the analysis is based on detailed primary information reported to the Federal Energy Regulatory Commission (FERC) and the U.S. Environmental Protection Agency (EPA) Page 12 of 77 by PSCO. FERC Form 714 data provides hourly load generation for operational control areas such as that of PSCO. Additionally, the Continuous Emissions Monitoring System (CEMS) of the EPA is the source of boiler-specific hourly generation and emissions data. This information is relied on heavily for the analysis of the July 2, 2008, and Sept. 28-29, 2008, wind events discussed in Chapter IV. Finally, ERCOT requires generators to publish on a 15-minute basis their generation by fuel and type of facility, enabling analysis of the interaction between wind, coal and natural gas combustion turbines and combined-cycle facilities in the ERCOT region. These data provide the analytical basis for the analysis of ERCOT operations in Chapter VI.

To access the full document, click on the link below.

- 1 Colorado Climate Action Plan http://www.coloradoclimate.org/
- 2 Environment Colorado website, http://environmentcolorado.org/envcoenergy.asp?id2=22373
- 3 As used in this report, the term cycling refers to sudden increases or decreases in power generation output. Cycling occurs for a variety of reasons including making way for alternative generation, maintenance and/or equipment failure or sudden changes in load size.

I affirm that these comments are true and correct to the best of my knowledge and belief. Curt Hilgenberg To: Wisconsin Senate Committee on Commerce, Utilities, Energy and Rail

Date: October 10, 2010

Subject: Comments on clearing house rule 10-057(PSC 128)

Senators:

The PSC 128 wind turbine siting rules are in need of change.

The setbacks need to be measured from property lines to respect the rights of the non-participating land owners.

The sound levels are to apply starting at the non-participating land owner's property line and anywhere on that non- participating property, because a person should be safe on all areas of a person's land and wind turbines tend to be sited on multiple sides of non participating land.

The sound levels should have a limit of 5 dB(A) above ambient sound levels. Simple because the state has a very large diversity of ambient sound levels.

The state should perform a study on the health effects of the turbines before rushing into these rules. PSC has not incorporated any of the findings of the Mars Hills Turbine Project Health Effects-Pilot Study that is documenting the health effects of the turbines.

The PSC has not responded to questions about manufacturer calculated blade throw distances. It appears the PSC has not considered this information. Yet when I submit blade throw calculated distances that show debris is thrown at significant distance, this information is not refuted nor is it incorporated in the safely set back distance.

I do not understand why it is such a hard concept for people to understand that setbacks should be from property lines. Government must understand this, since a tax bill is based on the land right up to the property line. PSC 128 creates a virtual nightmare for rural property owners. These rules allow a single 500 foot turbine to be erected on a 40 acre field without permission from any of the neighboring land owners, this one 500 foot turbine has now stopped any housing development on 133 acres of the neighbors surrounding land. That's what the PSC has done with these rules. How can any individual, business, township, village, or city have any development plans with these types of rules.

The wind developers say if the setbacks are increased they will not be able to site wind turbines, nothing is stopping the developers from obtaining easements from the land owners!

In fact, in other states wind turbine developers are siting turbines using rules that measure substantial distances the from the non participating property lines.

The PSC 128 rules allow the owner to use their own software to demonstrate compliance of sound requirements in the planning stage, the rules have the owners perform the pre and post construction sound measurements, the rules have the owners perform the measurements in response to noise complaints. There is no third party in the whole process. The owners are unregulated. These rules need to insert an independent third party review into this sound measurement process from the planning, to the pre and post installation sound studies, and into the complaint process.

PSC 128 subchapter IV discusses complaints. I hope you also read this chapter carefully. The surrounding residences are to rely on the owner of the turbines to compile a list of complaints. These rules need to provide a third party that compiles the wind turbine complaints and enforces the rules. This whole process should be at the cost of the wind developers not dropped on the local governments.

I am currently far safer living near the two nuclear plants than near a wind facility. These nuclear plants are regulated and I know that the safety standards are being monitored. The plants would be shutdown if they are not in compliance with safety regulations. I live by the nuclear plants and I am not considered collateral damage, but if wind turbines are constructed by me, I can be considered collateral damage. Why not build more nuclear plants, they produce higher quality jobs, more megawatts per acre and less costly power.

Respectfully,

Jeff Roberts

12113 Tannery Rd.

July hus

Mishicot, WI 54228

Attached:

- 1. Jeff Roberts authored "Debris Throw Distance" (13 pages)
- Jeff Roberts authored "PSC 128 Interaction with nonparticipating land" (5 pages)
- 3. Mars Hill Wind Turbine Project Health Effects Pilot Study (20 pages)



Wisconsin Behavioral Risk Factor Survey Brief: Health-Related Quality of Life

Using the Behavioral Risk Factor Survey to Examine How Wisconsin Adults View Their Health¹

Population health research increasingly examines factors beyond the purely biomedical to help explain patterns of health and health disparities. Evidence that physical health is related to socioeconomic factors and the differential life experiences they produce now prompts epidemiological researchers and social scientists alike to investigate the ways in which characteristics such as income, education and race are associated with the health of population subgroups (Idler and Kasl, 1994).

At the same time, there is increasing awareness among health researchers of the value of self-reported information. Subjective assessments (self-reports) of health status, once assumed to be unreliable and therefore lacking in utility, are now commonly included in population health surveys, as evidence accumulates that they mirror objective health status with a high degree of accuracy and provide useful adjunct information about the health of populations (Beatty, Schechter and Whitaker, 1996). Subjective assessments of health are thus likely to vary by socioeconomic and other characteristics, much as objective health measures do.

Questions tapping subjective assessments of health status and a related concept, health-related quality of life (HRQOL), are now included in the National Health and Nutrition Examination Survey (NHANES) and have appeared in the Centers for Disease Control and Prevention's (CDC's) Behavioral Risk Factor Survey (BRFS) since 1993.

What is Health-Related Quality of Life?

A key element of the concept of health-related quality of life is *self*-perception rather than observation or measurement by another person. Health-related quality of life includes

¹ This report was released in November, 2006. Funding was provided by the Centers for Disease Control and Prevention. Questions about the report or the Wisconsin Behavioral Risk Factor Survey should be addressed to Anne Ziege, PhD, Population Health Information Section, Bureau of Health Information and Policy, Division of Public Health, Wisconsin Department of Health and Family Services (ziegeal@dhfs.state.wi.us).



CREATING THE WINDMILL GHETTO

They say a picture is worth a thousand words.

This map illustrates the property rights issue for neighbors of industrial wind turbines.

Under current PSC siting regulations, turbines can exist 1000' from a home and about 500' from a property line.

Thus the person that owns parcel "A" can site a turbine and collect the contracted payments from a wind developer.

The Owners of Parcels "B", "C", "D", and "E" have their right to build a home anywhere in the yellow circle taken from them without any compensation. Even

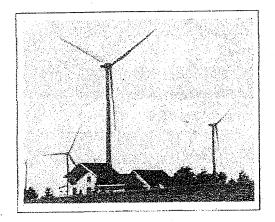
worse, they cannot appeal to any local government or planning committee. They have no say whatsoever in this "taking"!

Thus an owner of 23 acres can "take" the right to build a home or office from an additional 50 acres that is owned by his neighbors.

Under current law, local governments do at least have the right to ensure public health and safety and many have used that authority to make sure that yellow circles don't pop up in their communities.

Statewide siting preemption would remove even this small amount of local control from our Wisconsin communities.

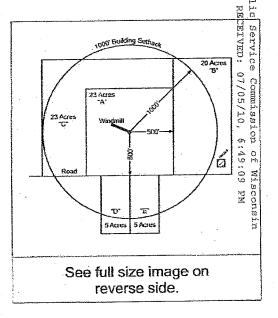
The theoretical environmental benefits of siting industrial wind turbines go to the entire planet. But the costs are overwhelmingly borne by neighboring landowners in terms of plummeting land values, loss of control over their property, and noise effects that can have long term health consequences.



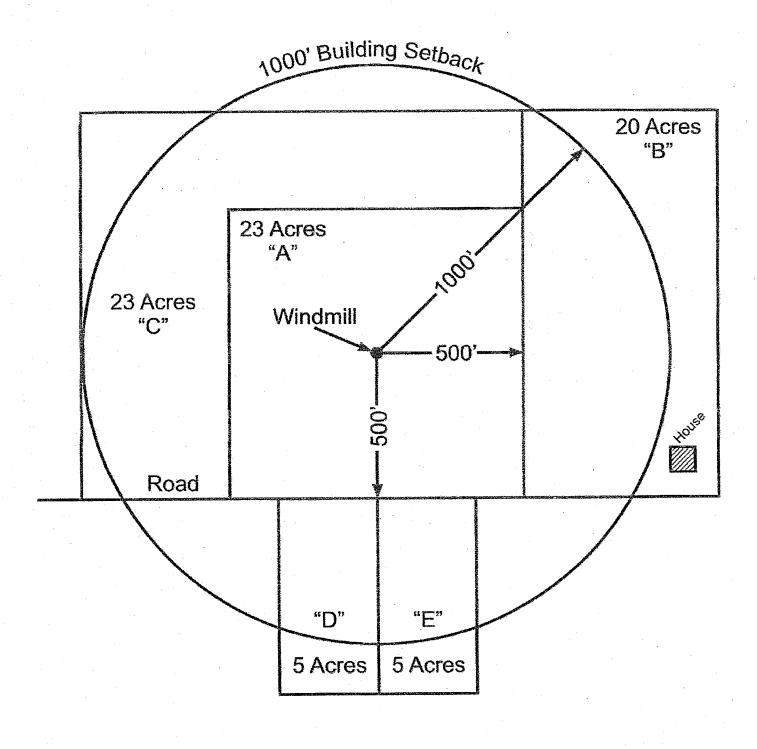
The Wisconsin Legislature can assure that the cost/benefit distribution is done more fairly.

We should insist that siting decisions are consistent with comprehensive local planning.

And any consideration of a state preemption bill should make certain that neighbors are protected either through adequate setbacks or by requiring easements from those that will have to live with the windmills.



For more information contact CWESt's representative Bob Welch at 608-819-0150



Jim Mueller

From: Julie Schneider [jschneider795@yahoo.com]

Sent: Saturday, October 09, 2010 4:56 PM

To:

Jim Mueller

Subject: Fw: turbine rules

Jim

I have included the memo below. I really am sad I can't go with because it is so important to our lives, but I have to keep my job too.

Good Luck! Let me know what happens? I am grateful people like you are staying involved. I do know the risk to your business regarding this Jim.

Julie

From: Julie Schneider [jschneider795@yahoo.com]

Sent: Wednesday, June 30, 2010 10:03 PM

To: Newman, Paul C - PSC

Subject: turbine rules

This memo is critical it be included with the new rules request for the turbines and this is our public reasons why we do not the government to exclude us from the Public Service Committee rule setting. We need to be grandfathered in to the new rules.

Please assist me in getting this added?

We are asking you to hear us out before you make any more rules or decisions

Regarding windmills.

I am hearing you do not want to include us in your new regulations and you want

To leave us living in this environment without having to deal with our issues.

To do this is not only unfair, and inhumane, it is an act of "see no evil", that

Is disrespectful to us as citizens of this country. I am wondering if any of you voting

That way really feel "right" about it. I am asking you to reconsider.

Do you know what it is like to come home and not be able to watch tv when you

are devastated your 4 year old nephew has a brain tumor and you are desperate for something to take away the images that are burned in your brain of his pain, his huge "port" they stuck in his chest for future chemo. He had terrible misery and was moving continuously to escape pain. Do you know the images in your brain watching that? Do you have any idea how bad you want to go back to the comfort

of your home where you want to cry from mental exhaustion and then fall asleep watching some show that gives your mind an hour of rest? You turn on the television and you cannot watch it. It is "out" again. You cannot even imagine the sickness in your stomach when you realize your "sanctuary" at home is gone. You no longer have a place to go.

You have Constant flickering in the morning for an hour. You cannot escape from it, even with the blinds drawn. You cannot move into any room to be free of it if it has windows on that side of the home. You cannot fall asleep at night from the noise that ensues when Winds are more than 11 mph. It is not a "lulling" sound, but a grinding after rain. It is like a constant jet going over. It is also accompanied by a whooshing sound. It is not a comforting dull whoosh... It is a blackboard fingernail type noise that keeps you awake and drives you on the brink of madness. Everytime it rains, you cannot watch tv. Just when you are bored silly...you can't even watch tv. That has been taken away. You get irritable. But, W.E. and the people responsible don't really care. It isn't them. You find out they have given the neighbors radios, and all kinds of bandaids. They have told them they will pay for 120 channels on dishnetwork, but not you because you already had a dish. You are discriminated against. You fight and argue with them for over a year. You are so sick of it, and feel lost. What can you do? You have been lied to, argued with, discriminated against, and you are sick thinking about it. Sick to your stomach. Do you really think you wouldn't be like that? Try living it for even a week. You will not believe what this has done to your life. If you would have told me that 5 years ago, I would have said "I don't believe it".

We are peaceful people. We do not look to make trouble for anyone. We even waited to see how the windmills affected us before we judged them, because that is what is fair.

Yet, no one considered what is fair for us residents. We are in a low area. When I asked the engineer about the noise, and we asked them if they considered the geological location of them in respect to

homes, he admitted they did not. We told him We have constant droning. We have constant pressure we can feel in our ears. We wake 3-4 times a night. We have difficulty getting back to sleep. We live with flickering. We live with noise. When we walk now, we hear nothing. We used to hear birds. Now we hear an eerie silence. Nothing. We had moved here for privacy and quiet. We had moved here for wildlife and nature. That was taken away. Our beautiful view of the land was destroyed. Yet, that was the minor part. The major was the lack of sleep, the irritability, the headaches, the ear pressure, the flickering, the noise, the loss of home value. This isn't just a group of "whiners". This is reality. This is a company that stole our homes.

We are afraid. We had an expert on electrical here to tell us there is no such thing as stray voltage, yet we see cows die, etc in the news. "Oh no – there is no such thing as stray voltage. So, when we asked about energy surges, they couldn't answer that. We live in fear. We are worried when we let our 3 two year old grandchildren run in the yard. We are afraid to step on the lawn after a rain. We cannot stand it outside on the lawn during flickering, so we can't stand it inside our home, and we cannot stand it outside.

Our biggest complaint is our home value has dropped drastically. We had a couple people interested in our home, waiting for it to come up for sale. We finally decided maybe it was time. We are unhappy here now due to the windmills. But, of course, they are no longer interested. They said "No, we would NEVER want to live in that area – you have windmills." So I called the president of the North East Realtors Association. "Yes, you have a huge loss in value, he said. I don't know the exact percent, but I can tell you I do not have people willing to live in that area unless the price is drastically reduced or not at all. I would testify to that." So, we have home value loss. Everything we put into our home, was with a plan to sell it someday and retire in a smaller home. It is now gone. So basically our retirement was also taken away from us. Not just our home. Our retirement. Why are a small isolated group of people burdened with all the liabilities and burdened with health hazards and long term affects "for the good of the nation." It hasn't even been proven this will "help" the nation. In fact, the engineer admitted to us it wouldn't really. He also stated they put them where they had easy access to high lines. They didn't care if there were residents. They had no right to take away our property. They had not right to inflict us with flickering and noise without

restitution. How can you people even consider leaving us out of the rules being set up? Can you do that and sleep at night? Can you really turn your back and walk away knowing what has been taken from us? It doesn't matter because it isn't you?

Do you really want to believe you will never pay for that? We need to be grandfathered in to the new rules.

Do you know what it feels like to have your home literally "taken" from you without having a thing to say about it. Everything you have always worked for has now suddenly been taken from you without even a word. You never were able to voice your opinion because you were not the property owner where they stuck these units. Our happiness, health, well being, financial value, everything is gone. Yet, you want to ignore this, and just make "future" laws. Why would you do that to innocent people?

We are asking you, if you have any kind of conscience, to please reconsider that. Please help us. We haven't done anything except work hard for our homes. It feels like we have had them stolen, and no one wants to step outside of the box and help us. We

Are wondering how you can be so cold. Because we are a number? Well, this number tries to sleep. This number has headaches and pressure in our ears. We have flickering.

This number cannot believe a government allowed this. Cannot believe any fellow

Citizens would do that to someone. This number feels sick and hopeless and feels fear and disgust. We want our home back. It is that simple.

We live with days of "airline" type pressure in our ears and lack of sleep. We are often

Irritable. The flickering causes confusion. I race to get out of the house because I cannot

stand it. It is literally driving us mad. Why shouldn't we be compensated? Do you really believe that is right?

I am sickened when I hear no one will help. Why? What have we done to deserve that?

Why are you turning your backs on us? For greed? For political reasons? Please

reconsider and get the residents, this was forced upon, some help. Please do what is

right for us. The helpless feeling is sickening in my stomach. It is destroying us.

At a minimum, give us our home value back so we can move it we wish. We didn't ask for anything from the way you have destroyed our lives. We are simply asking for our home value back.

We argue when we are irritated that the tv doesn't work. We blame each other because neither of us has been able to get help from someone. We get so irritable it is unbelievable. I am ashamed, but it is still a fact. We have asked W.E Energies for

Help, and they came right out and told us "We won't deal with individuals on this.".

W.E. Energies are thieves in our mind. . They have stolen our home. We are asking you now to help us. Please.

We are not "just a number". We are people. We give to charities. We have family. We work for our home. We deserve our home value. We have worked our entire career for that. We just want the security of our home again, and the value returned to us. I don't think that is much to ask when I hear about the High wages they pay workers, and the big money W.E. officials are reaping, and the government is "gaining". We aren't asking for big money. We are asking for our home value back so we can now make the choice on whether to move or not. Our choice has been taken away. We just want it returned. This is a small price for you to pay. Do not pass these rules without including us. Do not leave us on the side like a bastard child. We have a place in this group. Don't kick us to the curb because of politics please. If someone stole from you, you would feel sick and you would want to be compensated. If someone destroyed your home, you would expect payback. If someone wrecked your lives, you would want it back like we do.

Please do not pass this without including us. Laws have been broken – like the nuisance law, and the reverse condemnation laws. No one has paid for these violations against us.

All we can do is ask you to please do what is right now.

Thank you for listening.

Mr & Mrs. David E Schneider

Senator Jeff Plale Chairman of Senate Committee on Commerce, Utilities, Energy, and Rail P.O. Box 7882 Madison, WI 53707-7882

Senator Plale:

I would like to be submitted for the record for the Senate PUBLIC HEARING
Committee on Commerce, Utilities, Energy, and Rail Clearinghouse Rule 10-057
Relating to the siting of wind energy systems.

I AM **OPPOSED** TO THE CURRENTLY PROPOSED WIND SITING RULES. THEY ARE WAY TOO CLOSE TO OUR HOMES.

Thank you for holding a public hearing on the Wisconsin State Wind Turbine Siting Rules introduced to the Wisconsin Senate on September 2, 2010 by the Public Service Commission of Wisconsin.

The Ledge Wind Project is proposed all around my home so I have a very vested interest in it as it relates to my family. I have spent countless hours researching information available on the web from those who have been involved in wind a lot longer than Wisconsin. The report from the W.H.O. speaks volumes in regards to safe siting. The live testimonies from residents in Fond du Lac's wind ghetto have backed up issues concerning health and safety as well. As our Brown County Board of Health stated, what is the rush to put these beasts up? Where are the health studies? There is a problem when the State Health Department won't conduct a study because they are appointed by Governor Doyle and they are afraid to lose their jobs if they show evidence of problems with siting these too close to homes. If a study will not be conducted then you must error on the side of health and safety, I beg of you! Please push the state health department to do their job!

I find the reports of discontinued TV and radio reception to be annoyances and probably quite frustrating, but what concerns me the most is the fact that my young family and I would be subjected to interrupted sleep which leads to health issues. I cannot imagine having to keep my windows closed and room darkening blinds installed just to try to survive! How can anyone takes those rights away from me? Who will take a stand against big wind and greed to protect the families of Wisconsin? Health studies would show that these aren't issues that might happen, but rather, to what extent that they WILL happen. What person of moral and ethical substance could look into the facts associated with the current siting rules and not question the potential adverse risk to the health and safety of human beings? Please, hear the outcry, and help us.

I can't speak for all the townships, but here in Morrison, we have had devastating contamination of our wells due to the near surface bedrock. Do proponents really think that digging 81 miles of trenches and 100 foundations into our area farm fields often laden with manure, will have no impact on our wells?? Please, to think such would mean complete naivety. Can anyone offer a guarantee and full restoration with no expense to homeowners when it does happen? Interestingly, no one is willing.

Additionally, I am extremely alarmed that as a homeowner, property owner and tax payer, I can be violated when it comes to filling the pockets of those with less than desired integrity. In another act that

resembles more of a socialistic country than one of democracy, our local government's ordinances and requests have been completely overlooked and ignored. I'm tired of this kind of authoritative rule, and I'm looking forward to our November elections. There is not a United States citizen out there, who would concede to the giving up of their rights to a portion of their property and yet, that is just what happens when these turbines are placed so close to neighboring property. Where is the justice in this? I have worked too hard, and have paid too much in property taxes, to be taken advantage of like this.

In the very least, there needs to be rules included to protect those negatively impacted with a property protection plan as Commissioner Azar pointed out in her letter to Senate President Risser and Speaker Sheridan.

Let's be realistic....Wisconsin a wind state??? Look at how we're rated. Based on the amount of wind we receive and our population density, this is a complete joke. Not only that, but our manufacturers cannot stand higher electric rates mandated by wind. As we add so many wind turbines to our grid the cost of updating the transmission line system will continue to be passed down to our manufacturers and they will be forced to leave the state and take Wisconsin jobs with them. Not to mention the increased energy costs to consumers like me and you.

These industrial turbines are being pushed through under the disguise of a "farm" so they avoid inspections and regulations and this too should be included in the wind siting rules.

It should also be illegal for wind developers to sign-up town officials of any kind. This must be in the new state-wide siting rules. I live in the Town of Morrison in Brown County and 2 out of 3 of my town board members, our zoning administrator, and 4 out of 7 of our planning committee members have a wind turbine contract in the Ledge Wind Project which is proposing 100 turbines in the towns of Morrison, Glenmore, Wrightstown, and Holland. 2 out of 3 of the Wrightstown board members have also signed contracts. How can they be impartial board members when they are receiving monetary gain from the project? Wind developers should also have to disclose their intent to develop an area prior to signing up land owners by holding a town-wide meeting. Its truly a project that has been seasoned with deception, greed, self-interest and lack of integrity.

You don't have to look far to know there is a problem, you just have to look. Please put on the brakes and take a few months to conduct a study before we destroy more families and communities. We need industry and we need families in Wisconsin. We don't need industry stealing from our families living room, bedrooms, and our pocket books.

Here is what I'm asking you to do with the current wind siting rules:

- 1. Setback: Change from 3.1 times the height of the turbine to $\frac{1}{2}$ mile from a property line.
- 2. Noise: Change from 50 decibels and 45 decibels at night to 5 decibels over ambient.
- 3. Include property protection plans where the wind developer must buy the impacted home at the current market value of a similar home that is not near a wind turbine project.
- 4. Give some control back to the local towns who are closest to project area
- 5. Inspect and regulate this industry like any other industrial power plant.
- 6. Make it illegal for wind developers to sign contracts with town officials.
- 7. Force the State Health Department to conduct an epidemiological study of existing residents of wind projects.

Sincerely,

Sincerely,

Lisa Harmann 4544 Mill Road Denmark, Wisconsin 54208 920-864-7111 lharmann@titletown.org

State of Wisconsin County of Brown

On this day 10-12-10, personally appeared before me, 15a 1

to me known to be the person described in and who executed the within and foregoing instrument, and acknowledged that he/she signed the same as his/her voluntary act and deed, for the uses and purposes therein mentioned.

Cutalina Cafoada

Notary's Signature

Llay 06 c 70 / 3

Notary's Expiration Date

Notary's Seal

RE: Senate Hearing by Committee on Energy October 13

Author: Herbert S. Coussons, MD

Video testimony at: http://www.youtube.com/watch?v=nUQdeUXapD0

Introduction

Thank you for reading and considering my comments. I am writing to express my disappointment with the process and outcome of the PSC and Wind Siting Council guidelines. It appears that the council ignored more and more evidence that shows health, safety and financial stress in communities that are burdened against their will with large industrial wind turbines. In fact in their recommendations on pages 19 thru 22, the constantly acknowledge sources that support strict guidelines to protect against disturbing noise, yet they chose to included more loose or weaker guidelines in their final conclusion. These weaker guidelines will result in annoyance, complaints, disturbed sleep and ultimately adverse health in a certain percentage of Wisconsin residents that can be mitigated from the outset by increasing the setback.

It is clear from extensive testimony, that more studies are needed to guarantee the safety of those living close to industrial wind turbines. What is the harm in adopting the most conservative guidelines until these studies can be completed? It is always easier to add more turbines than to remove turbines once they are there. Dr McFadden concluded, "The evidence does not support a conclusion that wind turbines cause adverse health outcomes." Yet other expert testimony has exactly the opposite conclusion that when sited close to people, there will be an adverse health effects in a certain percentage of the population. Studies continue to determine the proper siting distance that will mitigate these health consequences. In a public presentation in Brown County Dr McFadden agreed that there is likewise "no evidence to claim that industrial wind systems are safe" and to claim that they are safe is not only misleading, but false." At best the jury is out and the evidence can be used to make claims by both sides of the argument. Because of this I believe it is premature to endorse the support the Rulemaking document as published on August 9, 2010 until more conclusive evidence is available.

I have reviewed the scientific literature. I have seen the testimony of residents that live in wind turbine communities in Wisconsin and elsewhere. I have reviewed the medical records of residents that have suffered from adverse health consequences. I have visited wind developments. And I have come to the same conclusions as many of studies from the US, Canada, New Zealand and the whole of Europe. Large industrial wind turbine developments do not belong in close proximity to locations where people live and work. I hope to show valid, accepted and reproducible data that put guidelines on siting distances.

At 30-40dB measurable objective sleep disturbances are seen.

At 40-55dB adverse health effects are seen.

Above 55dB is dangerous to public health.

Experience has shown industrial wind turbines cause noise that exceeds 40 dB when in close proximity. Noise deteriorates over distance. Allowing for proper distance will mitigate the

noise levels both experienced and predicted by independent research and the wind industry. The safest minimum distance to protect the health and safety is to allow for less than 40dB, which correlates to 0.5 miles or 2640 feet. The optimal distance in a rural setting would allow for no more than a 10dB increase in ambient noise which would correlate to just over one mile.

Yet the Wind Siting council came to a different conclusion, "The Council does not believe that the rules should include a noise-related setback requirement. Setback distance is only an indirect measure of exposure to noise... Evidence from studies of other sources of environmental noise, suggests that a daytime noise threshold of 50 dBA is well below the threshold at which measurable adverse health effects (e.g. hearing impairment, high blood pressure) from noise are seen." This completely ignores the World Health Organization exhaustive work on environmental noise and sleep disturbance. This is not surprising as the Wind Siting Council in majority is made up of individuals who are supported by the wind industry, or they belong to organizations whose "modus operandi is to identify barriers to renewable energy development, and come up with strategies for overcoming those problems, whether they be low buyback rates, permitting challenges, or regulatory roadblocks." In fact when Dr McFadden was asked to be an expert witness, he declined stating he was not an expert in wind energy health effects. After completing my own research I believe that a biased and uninformed group such as this is incapable of rendering a recommendation that looks out for the interests of the citizens in Wisconsin as they face decades of permanent development by the wind industry. The guidelines ignore local communities' public opinion and the rulemaking process has left local residents facing the threat of large wind developments feeling powerless and unable to have a voice in the politics of a permanent alteration to their way of life.

Background

As Wind Energy projects continue to expand across Wisconsin and as the need for energy independence becomes more urgent, controversy over siting regulations has become a dividing point in communities across the state. The recent applications for projects in northeast Wisconsin make safe siting guidelines the center of the argument. In local townships such as ours in Wrightstown, Holland, Morrison, and Glenmore, hours of emotionally charged meetings and conflicted town supervisors have lead to only more controversy. A vote of town's members as slanted as 245-18 overwhelmingly does not support the Ledge Wind project. These same conflicts are seen world wide as wind energy projects develop. It is clear that studies are presented both supporting and refuting to notion that wind turbines harm people's health. It is my opinion as a physician that the best evidence support that building large wind energy turbines in close proximity to humans has a negative impact on the health.

Medical Facts

Normal sleep is essential for health and well-being. The science of sleep study has established the population averages for the amount of time it takes to fall asleep. The number of awakenings during the night and the number of sleep arousals that are standard. (American Academy of Sleep Medicine 2005.)

Disturbed sleep is defined as problems falling asleep, excessive awakening, excessive sleep arousals, difficulty resuming sleep after awakening, and an overall lack of restorative sleep.

Environmental sleep disorder is when outside factors such as noise cause sleep disturbance, insomnia, or results in daytime fatigue. These problems result in deficits of concentration, attention and cognitive performance, reduced vigilance, malaise, depressed mood, and irritability. The effects are seen in all ages and both genders.

Long-term sleep disturbance has great influence on metabolic and hormonal function. C-reactive protein is an inflammatory marker associated with the development of atherosclerotic plaques in the coronary vessels and is associated with increased risks of strokes and heart attacks. CRP as a risk predictor of stokes and heart attacks increases as sleep disturbance increases. (Meier-Ewert et al., 2004)

Leptin is secreted at night and helps to regulate appetite and glucose metabolism. When humans are sleep deprived, weight gain and impaired glucose tolerance is seen.

Cortisol has also been studied as a separate marker of disease related to environmental sleep disturbance. Higher cortisol levels are seen in individuals that are sleep deprived. Higher cortisol levels lead to increased blood pressure and impaired glucose tolerance. In fact the risk of heart attacks is two fold higher in those with insomnia. (Hyyppa and Kronholm, 1989) Many other health hazards can be directly related to sleep disturbance, including decreased immunity and susceptibility to viral illness, and many other consequences related to daytime fatigue such as work injuries, poor school performance and auto accidents. It has been shown that fatigue may impair driving more than alcohol. Work injuries may be increased, and children suffer from behavioral problems and decreased school performance. Children have problems with learning, attention and memory. These are all substantiated medical facts that stand alone as they relate to sleep disturbances. Many causes of sleep disturbance such as shift work, sleep apnea and environmental have been shown to cause the same group of adverse health effects. In summary, the overall health impact is that *death rates increase as sleep decreases* (Patel et al., 2004; Tamakoshi and Ohno, 2004) And according to Kripke et al. 1979, reduced sleep may be a greater independent risk factor for death than smoking or hypertension.

Environmental factors

Noise disturbs sleep. Many studies over the last 30 years show there are physical responses to noise as it disturbs sleep. EEG changes, blood pressure and heart rate, body movement and restlessness, and awakening can all be measured in the common sleep study. Environmental factors such as airport noise, road traffic, railway noise, and neighbor noise have all been reported as sources of sleep disturbance. They all follow a similar curve in that as noise levels increase so do complaints of sleep disturbance. At 40 dB less than 5% of individuals show night time sleep disturbance. At 50dB about 6% have sleep disturbance. At 55dB up to 10% have sleep disturbance. At 60dB as high as 15% have sleep disturbance. (European Commission, 2004) The neighbor induced noise is worth a closer look as up to 20% of neighbors are disturbed by voices, water running, toilets, TV, radio and music as well as neighbors pets. This is important in consideration of siting wind turbines because most locations targeted for development are rural (though not sparsely populated in southern Brown County). These areas tend to be quieter at night than urban areas. The people that chose to live there do not have background ambient noise, making any additional noises more noticeable.

Experience is the Best Teacher

Wind Turbine noise is disturbing to those who live close to them. Planners of wind turbine developments need to take into account the noise complaints from existing sites and the real world examples of the noise disturbance caused by wind developments. Many of these sites have been in place for years and those that are in close proximity to people are rife with complaints, law suits and unhappy landowners. Proper siting away from people will prevent such complaints. (Hanning, 2009) Surveys of residents living in close proximity to industrial wind turbines show high levels of sleep disturbance and annoyance. In Kewaunee County 52% of individuals living within 2400 feet found noise to be problematic. 32% within 4800 feet and 4% greater than 1 mile were disturbed. 67% reported disturbed sleep if they lived within 1200 feet. (Kabes 2001) In Sweeden 2 studies yield similar results with complaints of disturbance rise as the noise levels increased from 32.5 dBA to 40 dBA. (Pederson and Persson 2007) Multiple other surveys from France, New Zealand, Canada, The United Kingdom, the Netherlands, Sweeden and others show similar results. The conclusion that industrial wind turbine noise is disturbing to people that live close to the developments is a fact. We should learn from others mistakes and not subject the people of Wisconsin to repeat the problems seen across the United States and the world. It is clear that proper siting by increasing the distance of the wind turbines from people will prevent the noise complaints. The deterioration of noise over distance is very predictable and several models exist for industrial wind turbines. (UK Department of Transport and Industry 2006; Kamperman and James 2008)

What is the Best Distance?

At least 14 published recommendations follow the same logic. Wind turbines cause noise. Noise disturbs sleep. Sleep disturbance has a bad effect on health. The conclusions of many sound studies show that the noise decreases as the distance from the turbine increases. (Theriault Acoustics, 2009 for Invenergy) Figure 9 "Predicted Noise Level Contours – Area" Shows that the entire Area shaded red will exceed 40dB. To reach an ambient level of less than 35 dB a home must be at least one mile away from the nearest turbine. To the northeast of the Ledge Wind Project that distance exceeds 2 miles. This agrees with the 14 studies tabulated in Dr Hanning's article "Sleep Disturbance and Wind Turbine Noise" (2009) Table 1 on page 33 summarizes these recommendations published between 1994 and 2009 by engineers, scientists, lawyers and physicians. The recommended setbacks vary from >0.62 miles to 1.55 miles with an average of 1.2 miles. At these distances the noise levels will be less than 45 dB. According to the WHO in their 2009 authoritative document on noise and sleep disturbance, levels between 32 dB and 42 dB will disturb sleep and noise levels of 50dB or higher have been proven to cause health consequences. The same study uses 21dB as a threshold for rural nighttime sleep.

According to Invenergy, the sample data from the Theriault study, the ambient noise in 8 locations in rural Brown county were measured. The highest noise recorded was an isolated 56 dBA and the predominant level of daytime noise was 32dB. The ambient nighttime noise averaged 25 dBA. According to the WHO standards, between 32 and 42dB or a 10dB level above ambient sound will be disruptive. If we use Invenergy's sound contour map, then a setback of one mile will be required to safely fall within these standards.

Best Choice

The council has a decision to make. With the known data on sound and sleep disturbance, with other wind farm failures by close siting, and with the wind industries predictions of sound in the wind farm – will the council make the best recommendation for the people living in Wisconsin and take steps to be conservative by placing a setback of one mile from where people live, work, and attend school? This is the best choice based on the current data to ensure the safety of those living within a development by keeping the noise levels less than 40dBA

Or will the council compromise the standards knowing that up to 50% people will experience disrupted sleep and 5% may suffer health effects if ½ mile is used? Or worse yet if 1250 feet is used, then up to 67% will complain of disturbed sleep and up to 15% will see adverse health effects.

TABLES

Table 1 From Hanning 2009; Recommendations for setback of residential properties from industrial wind turbines.

Authority	Year	<u>Notes</u>	Rec'd	Rec'd
·		•	<u>miles</u>	<u>Kilometers</u>
Frey and Hadden	2007	Scientists. Turbines >2MW	>1.24	>2
Frey and Hadden	2007	Scientists. Turbines <2MW	1.24	2
Harry	2007	UK Physician	1.5	2.4
Pierpont	2008	US Physician	1.5	2.4
Welsh Affairs Select Committee	1994	Recommendation for smaller turbines	0.93	1.5
Scottish Executive	2001	Visual recommendation included	1.24	2
Adams	2008	US Lawyer	1.55	2.5
Bowdler	2007	UK Noise engineer	1.24	2
French National Academy of Medicine	2006	French physicians	0.93	1.5
The Noise Association	2006	UK scientists	1	1.6
Kamperman and James	2008	US Noise engineers	>0.62	>1
Kamperman	2008	US Noise engineers	>1.24	>2
Bennet	2008	NZ scientist	>0.93	>1.5
Acoustic Ecology Institute	2009	US Noise engineers	0.93	1.5

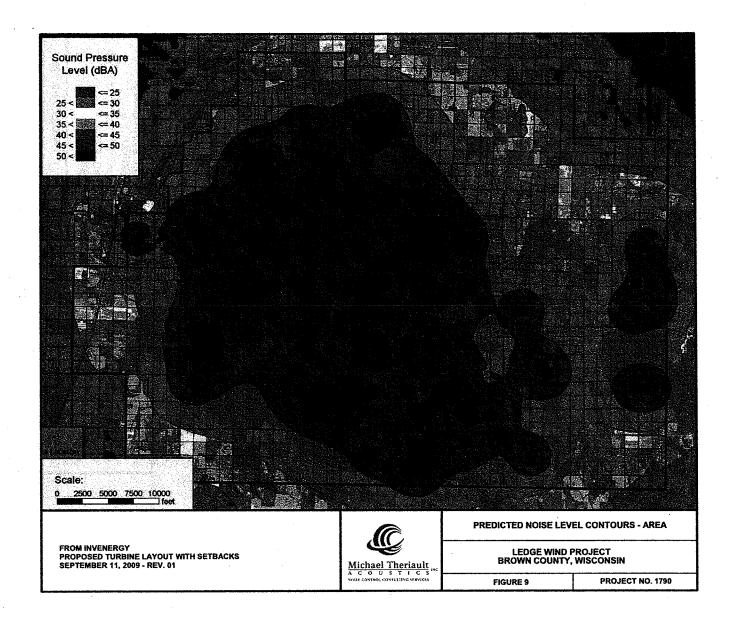
Table 3 from World Health Organization 2009; Effects of different levels of night noise on the population's health.

Average night noise level over one year	Health effect observed in the population
Up to 30dB	Although individual sensitivities and circumstanced may differ, it appears that up to this level no substantial biologic effects are observed.
30 to 40 dB	A number of effects on sleep are observed; body movements, awakening, self-reported sleep disturbance, arousals. The intensity of the effect depends on the nature of the source and the number of events. Vulnerable groups (elderly, children and chronically ill) are more susceptible.
40-55 dB	Adverse health effects are observed among an exposed population. Many people have to adapt their lives to cope with the noise at night.
Above 55 dB	The situation is considered increasingly dangerous for public health. Adverse health effects occur frequently, a sizeable portion of the population is highly annoyed and the sleep disturbed. There is evidence that the risk of cardiovascular disease increases.

Table 2 from Theriault 2009 for Invenergy; Summary of ambient noise levels in the Ledge Wind project assessment

Location	Description	0600-0800	1200-1400	1800-2000	2200-2400
1	Blake Rd	26	26	24	19
2	Cooperstown	31	33	34	29
3	Mill Road	34	36	34	27
4	Dickenson Road	29	37	34	31
5	Morrison Road	29	34	29	28
6	Park Road	31	31	28	20
7	Refuge Road	35	36	56	27
8	Mill/Blake Road	31	32	28	23

According to subsequent predictions, the rise in ambient noise will be 15-24 dBA based on 1000 ft setbacks. This exceeds the WHO guidelines for absolute noise levels and relative rise in noise in noise levels. The solution to keep the noise levels within acceptable range is to increase the setback.

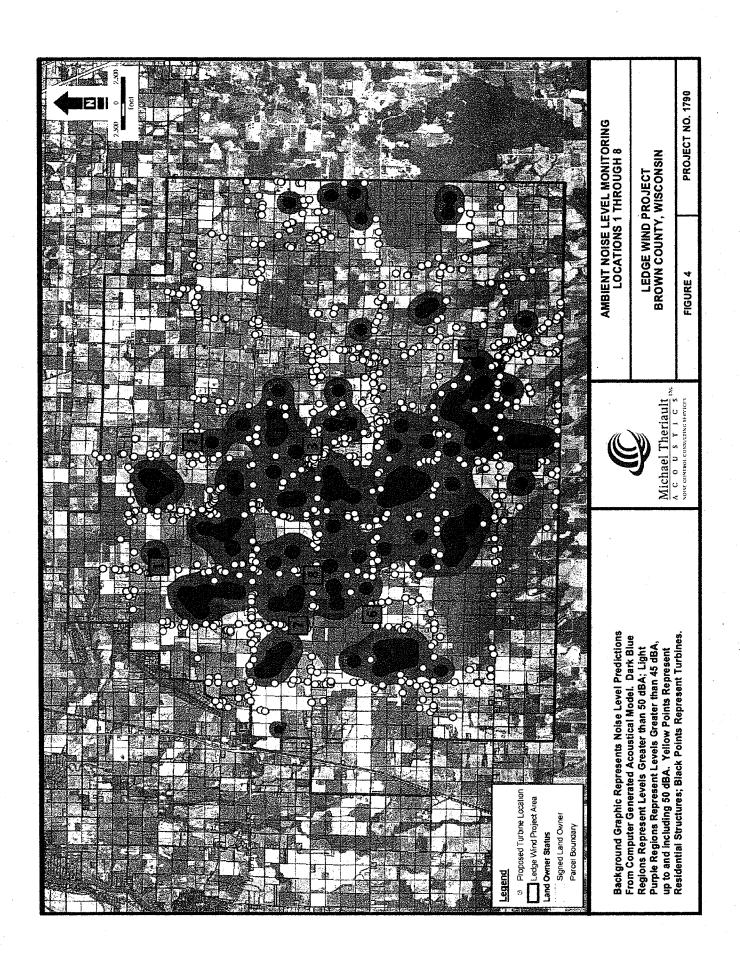


This Invenergy map supports the setbacks recommended in the chart and my opinions above.

The goal is to have noise that disturbs sleep and impacts health eliminated.

As you can see, all areas shaded red exceed 40 dBA. And all areas shaded Orange will exceed 35dBA. To be outside of the 40 dBA ring, one must live 2500 feet from the nearest turbine. To be outside of the 35 dBA ring one must live over one mile from the nearest turbine. This agrees with the summary in the Hanning paper.

In the chart below consider all of the homes in the areas of 45 to >50 dBA. Then consider the WHO statement on noise from 40-55 dBA "Adverse health effects are observed among an exposed population. Many people have to adapt their lives to cope with the noise at night."



Also consider the schools and businesses located in this area. Clearly the solution to this problem is in PROPER, SAFE siting. That siting guideline should include a minimum distance of $\frac{1}{2}$ to 1 mile based on independent research and data from the wind industry.

"There is no medical doubt that audible noise such as emitted by modern upwind industrial wind turbines sited close to human residences causes significant adverse health effects. These effects are mediated through sleep disturbance, physiological stress and psychological distress. This is settled medical science."

An Analysis of the American/Canadian Wind Energy Association sponsored "Wind Turbine Sound and Health Effects An Expert Panel Review, December 2009." Peer reviewed and published January 2010.

Summary and Conclusion

Sleep is basic and important to human health. When sleep is disturbed, health suffers.

Noise disturbs sleep.

Above 30dB sensitive individuals complain.

At 30-40dB measurable objective sleep disturbances are seen.

At 40-55dB adverse health effects are seen.

Above 55dB is dangerous to public health.

Experience has shown industrial wind turbines cause noise that exceeds 40 dB when in close proximity.

Noise deteriorates over distance.

Allowing for proper distance will mitigate the noise levels both experienced and predicted by independent research and the wind industry.

The safest minimum distance to protect the health and safety is to allow for less than 40dB, which correlates to 0.5 miles or 2640 feet.

The optimal distance in a rural setting would allow for no more than a 10dB increase in ambient noise which would correlate to just over one mile.

As a physician and resident of Wisconsin in an area targeted for large industrial wind turbines, I ask the committee to make the best recommendation for the people living in Wisconsin and take steps to be conservative by placing a setback of one mile from where people live, work, and attend school. This is the best choice based on the current data to ensure the safety of those living within a development.

Or will the council compromise the standards knowing that at 2640 feet sleep complaints will develop? What percentage of residents is an acceptable compromise when action now by proper siting will prevent these problems?

Hour

Respectfully, Herbert S. Coussons, MD

State of Wisconsin County of Brown

On this day CCND 12th 2010	e personally appeared before me,
Herb Coussum, MO	
	ibed in and who executed the within and
	dged that he/she signed the same as his/her
voluntary act and deed, for the uses	and purposes therein mentioned.
heil Schrit	
Notary's Signature	
10/20/13	
Notary's Expiration Date	

Notary's Seal

KERRI J SCHMIDT Notary Public State of Wisconsin "The only mitigation of sleep disturbance from industrial wind turbine noise is a setback of at least 1.5 km," Christopher Hanning, MD

Posted By admin On July 2, 2009 @ 6:00 am

"In my expert opinion, from my knowledge of sleep physiology and a review of the available research, I have no doubt that wind turbine noise emissions cause sleep disturbance and ill health."



Christopher Hanning, MD

Leading British sleep specialist, Dr. Christopher Hanning [2], explains the profound repercussions of wind turbines disrupting sleep—a matter the wind turbine salesman at your last town meeting, along with the wind industry in general, refuse to acknowledge, much less address in any realistic manner. Having reviewed a considerable body of clinical evidence (note: wind salesmen and acousticians are not clinicians), Hanning calls for setbacks of at least 1.5 km (1 mile). (Nina Pierpont, MD, PhD, would consider that inadequate. She calls for 2 km = 1.24 mi):

"The only mitigation of sleep disturbance from industrial wind turbine noise is a setback of at least 1.5km, and probably greater. This estimate is based on data from present installations, many of which have a much smaller rated capacity than those proposed by Nuon Renewables [3] [a wind developer proposing a wind plant in Swinford, UK]"— Christopher Hanning, MD, "Sleep Disturbance and Wind Turbine Noise [4]" (June 14, 2009), p. 27.

[»] From Hanning's report [4]:

Sleep is a universal phenomenon. Every living organism contains, within its DNA, genes for a body clock which regulates an activity-inactivity cycle. In mammals, including humans, this is expressed as one or more sleep periods per 24 hours. Sleep was previously thought to be a period of withdrawal from the world designed to allow the body to recuperate and repair itself. However, modern research has shown that sleep is primarily by the brain and for the brain. The major purpose of sleep seems to be the proper laying down and storage of memories, hence the need for adequate sleep in children to facilitate learning and the poor memory and cognitive function in adults with impaired sleep from whatever cause.

Inadequate sleep has been associated not just with fatigue, sleepiness and cognitive impairment but also with an increased risk of obesity, impaired glucose tolerance (risk of diabetes), high blood pressure, heart disease, cancer and depression. Sleepy people have an increased risk of road traffic accidents.

Humans have two types of sleep, slow wave (SWS) and rapid eye movement (REM). SWS is the deep sleep which occurs early in the night while REM or dreaming sleep occurs mostly in the second half of the night. Sleep is arranged in a succession of cycles, each lasting about 90 minutes. We commonly wake between cycles, particularly between the second and third, third and fourth and fourth and fifth cycles. Awakenings are not remembered if they are less than 30 seconds in duration. As we age, awakenings become more likely and longer so we start to remember them.

Noise interferes with sleep in several ways. Firstly, it may be sufficiently loud or annoying to prevent the onset of sleep or the return to sleep following an awakening. It is clear also that some types of noise are more annoying than others. Constant noise is less annoying than irregular noise which varies in frequency and loudness, for example, snoring, particularly if accompanied by the snorts of sleep apnoea (breath holding). The swishing or thumping noise associated with wind turbines seems to be particularly annoying as the frequency and loudness varies with changes in wind speed and local atmospheric conditions. While there is no doubt of the occurrence of these noises and their audibility over long distances, up to 3-4km in some reports, the actual cause has not yet been fully elucidated (Bowdler 2008). Despite recommendations by the Government's own Noise Working Group, UK research in this area has been stopped.

Secondly, noise experienced during sleep may arouse or awaken the sleeper. A sufficiently loud or prolonged noise will result in full awakening which may be long enough to recall. Short awakenings are not recalled as, during the transition from sleep to wakefulness, one of the last functions to recover is memory (strictly, the transfer of information from short term to long term memory). The reverse is true for the transition from wakefulness to sleep. Thus only awakenings of longer than 20-30 seconds are subsequently recalled. Research that relies on recalled awakenings alone may underestimate the effect.

Noise insufficient to cause awakening may cause an arousal. An arousal is brief, often only a few seconds long, with the sleeper moving from a deep level of sleep to a lighter level and back to a deeper level. Because full wakefulness is not reached, the sleeper has no memory of the event but the sleep has been disrupted just as effectively as if wakefulness had occurred. It is possible for several hundred arousals to occur each night without the sufferer being able to recall any of them. The sleep, because it is broken, is unrefreshing, resulting in sleepiness, fatigue, headaches and poor memory and concentration (Martin 1997)—many of the symptoms of "wind turbine syndrome." Arousals are associated not just with an increase in brain activity but also with physiological changes, an increase in heart rate and blood pressure, which are thought to be responsible for the increase in cardiovascular risk. Arousals occur naturally during sleep and increase with age (Boselli 1998), which may make the elderly more vulnerable to wind turbine noise. Arousals may be caused by sound events as low as 32 dBA and awakenings with events of 42dBA (Muzet and Miedema 2005), well within the measured noise levels of current "wind farms" and the levels permitted by ETSU-R-97. Arousals in SWS may trigger a parasomnia (sleep walking, night terrors etc.). Pierpont (2009 and personal communication) notes that parasomnias developed in some of the children in her study group when exposed to turbine noise.

Arousals are caused by aircraft, railway and traffic noise. In one study of aircraft noise, arousals were four times more likely to result than awakenings (Basner 2008a&b). Freight trains are more likely to cause arousals than passenger trains, presumably because they are slower, generating more low frequency noise and taking longer to pass (Saremi 2008). The noise of wind turbines has been likened to a "passing train that never passes," which may explain why wind turbine noise is prone to cause sleep disruption.

It is often claimed that continual exposure to a noise results in habituation, i.e., one gets used to the noise. There is little research to confirm this assertion, and a recent small study (Pirrera et al. 2009) looking at the effects of traffic noise on sleep efficiency suggests that it is not so.

Sleep disturbance and impairment of the ability to return to sleep is not trivial, as almost all of us can testify. In the short term, the resulting deprivation of sleep results in daytime fatigue and sleepiness, poor concentration and memory function. Accident risks increase. In the longer term, sleep deprivation is linked to depression, weight gain,

diabetes, high blood pressure and heart disease. There is a very large body of literature, but please see Meerlo et al., 2008, Harding and Feldman, 2008 and Hart et al., 2008 for recent work on this subject. A more general review can found on Wikipedia: http://en.wikipedia.org/wiki/Sleep deprivation [5]

In weighing the evidence, I find that, on the one hand, there is a large number of reported cases of sleep disturbance and, in some cases, ill health as a result of exposure to noise from wind turbines, supported by a number of research reports that tend to confirm the validity of the anecdotal reports and provide a reasonable basis for the complaints. On the other, we have badly designed industry and government reports which seek to show that there is no problem. I find the latter unconvincing.

In my expert opinion, from my knowledge of sleep physiology and a review of the available research, I have no doubt that wind turbine noise emissions cause sleep disturbance and ill health.

Table 1. Recommendations for setback of residential properties from industrial wind turbines

Note 1. The 2km limit from edges of towns and villages seems to have been set more for visual than noise reasons

Authority	Year	Notes	Recom	mendation
			Miles	Kilometres
Frey & Hadden	2007	Scientists. Turbines >2MW	>1.24	>2
Frey & Hadden	2007	Scientists. Turbines <2MW	1,24	2
Harry	2007	UK Physician	1.5	2.4
Pierpont	2008	US Physician	1.5	2.4
Welsh Affairs Select Committee	1994	Recommendation for smaller turbines	0.93	1.5
Scottish Executive	2007	See note 1.	1.24	2
Adams	2008	US Lawyer	1.55	2.5
Bowdler	2007	UK Noise engineer	1.24	2
French National Academy of Medicine	2006	French physicians	0.93	1.5
The Noise Association	2006	UK scientists	1	1.6
Kamperman & James	2008	US Noise engineers	>.62	>1
Kamperman	2008	US Noise engineer	>1.24	>2
Bennett	2008	NZ Scientist	>0.93	>1.5
Acoustic Ecology Institute	2009	US Noise engineers	0.93	1.5

[6]

Christopher Hanning, MD, "Sleep Disturbance and Wind Turbine Noise" (June 14, 2009), p. 33

» Click here [4] to read the entire report (PDF)

Article printed from Wind Turbine Syndrome: http://www.windturbinesyndrome.com

URL to article: http://www.windturbinesyndrome.com/?p=3010

URLs in this post:

[1] Image: http://www.windturbinesyndrome.com/wp-content/uploads/2009/07/chris-hanning-350x466.jpg

[2] Leading British sleep specialist, Dr. Christopher Hanning:

http://images.google.com/imgres?imgurl=http://www.intushealthcare.eu/uploads/images/christopher_hanning.jpg&imgrefurl=http://www.intushealthcare.eu/medical-advisory-

board.html&usg=__fhVlavLCnxTAebvjYPh0b5zG9Rw=&h=200&w=150&sz=7&hl=en&start=20&sig2=Z-kMn-

QRU5gDFqQntSswrw&tbnid=w9S1GtS2YNfDrM:&tbnh=104&tbnw=78&prev=/images%3Fq%3DChris%2BHanning%26gbv%3D2%26ndsp%3D18%26hl%3Den%26safe%3Doff%26sa%3DN%26start%3D18&ei=YVhNSte1L8vFmAfLhYm0BA

[3] Nuon Renewables: http://www.nuonrenewables.com/home.htm

[4] Sleep Disturbance and Wind Turbine Noise: http://www.windturbinesyndrome.com/wp-content/uploads/2009/07/wind-turbine-noise-and-sleep.pdf

[5] http://en.wikipedia.org/wiki/Sleep_deprivation: http://en.wikipedia.org/wiki/Sleep_deprivation

[6] Image: http://www.windturbinesyndrome.com/wp-content/uploads/2009/07/hanning-447x756.jpg

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VILLAGE OF MISHICOT

State of Wisconsin Manitowoc County

511 E. Main St. P. O. Box 385 Mishicot, WI 54228-0385 Telephone: 920.755.2525 Fax: 920.755.2525 e-mail vmishicot@lakefield.net www.mishicot.org

RESOLUTION

WHEREAS, the Manitowoc County Board of Supervisors has enacted an ordinance creating Manitowoc County Chapter 24 regulating wind energy systems, and

WHEREAS, changes are being considered by Manitowoc County to Chapter 24 regulating wind energy systems, and

WHEREAS, the matter of extra-territorial regulation and review for wind energy systems by incorporated municipalities has not been addressed in Manitowoc County Chapter 24 regulating wind energy systems; now therefore, be it

RESOLVED, by the Board of Trustees of the Village of Mishicot that Manitowoc County Chapter 24 regulating wind energy systems be amended to address the matter of extra-territorial regulation and review of wind energy systems within the statutory extraterritorial areas of incorporated municipalities.

Presented By: Ambar 11

Seconded By:

Clarence P. Meyer, Village President

Attest:

James Bydalek, Village Clerk-Treasurer

I, James Bydalek, Clerk-Treasurer of the Village of Mishicot do hereby certify that the above resolution was duly adopted by a vote of 4 in favor and 3 opposed of the Village Board of the Village of Mishicot on the 21st day of March, 2006.

James Bydalek, Village Clerk-Treasurer

VILLAGE OF MISHICOT

State of Wisconsin Manitowoc County

511 E. Main St. P. O. Box 385 Mishicot, WI 54228-0385 Telephone: 920.755.2525 Fax: 920.755.2525 e-mail vmishicot@lakefield.net www.mishicot.org

RESOLUTION

WHEREAS, the State of Wisconsin by Statue 66.1001 (Smart Growth) mandated that every municipality in the State of Wisconsin have a smart growth (Comprehensive Plan) adopted by the year 2020, and

WHEREAS, the Village of Mishicot contracted Bay Lake Regional Planning Commission to work with the Village to plan the Smart Growth so mandated, and

WHEREAS, the Village of Mishicot with Bay Lake agreed upon a smart growth plan, and

WHEREAS, this Smart Growth Plan was adopted by the Village of Mishicot and the Village of Mishicot Planning Commission on the 23rd day of October, 2001, and

WHEREAS, the Ordinance to adopt this plan was approved by the Village Board and adopted on December 4, 2001, and

WHEREAS, by Statute the Village of Mishicot has control over all areas within 1-1/2 miles of all village limits; now therefore, be it

RESOLVED, by the Board of Trustees of the Village of Mishicot that by Ordinance Chapter 24 all windmills and windmill farms shall be governed by the Village of Mishicot within 1-1/2 miles of all village limits.

Presented By: Bill Rock

Village Trustee

Seconded By:

Village Trustee

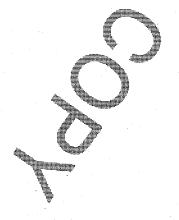
Clarence P. Meyer, Village President

Attest:

James Bydalek, Village Clerk-Treasurer

I, James Bydalek, Clerk-Treasurer of the Village of Mishicot do hereby certify that the above resolution was duly adopted by a vote of 6 in favor and 0 opposed of the Village Board of the Village of Mishicot on the 3rd day of May, 2005.

James Bydalek, Village Clerk-Treasurer



RESOLUTION

WHEREAS, the Gibson Town Board held a discussion on comments prepared and endorsed by the Towns of Mishicot, Two Creeks, Two Rivers, Carlton and West Kewaunee, and

WHEREAS, based upon this discussion of the Gibson Town Board, the Chairperson of the Gibson Town Board recommends the Gibson Town board concur and endorse the following comments and concerns regarding the May 14, 2010 draft of PSC Chapter 128 rules for wind energy systems:

1. Setbacks for wind turbines should be taken from the property line of the adjourning non-participants;

2. Setbacks for wind turbines should be large enough so as not to create shadow flicker or excessive ambient noise on adjacent property, a minimum of 2,640 feet;

3. Setbacks for wind turbines should be large enough not to create a loss of wind or property rights for the adjoining property;

4. The estimated decommissioning expenses should be backed by a Bond \Fund from the Developer;

5. Transportation expenses should also include damage caused to roads from the decommissioning of the wind turbines; and

6. EMS – Emergency Communication interference caused by Wind Turbines should be corrected by the Developer in conjunction with the political subdivisions within one year.

NOW, THEREFORE, BE IT-RESOLVED, by the Board of Supervisors of the Town of Gibson duly assembled this second day of September, 2010, that the Board concurs and endorses the comments and concerns expressed above, and

BE IT FURTHER RESOLVED, that the Town Clerk shall send a copy of this resolution to: The Public Service Commission of Wisconsin, Governor James Doyle, Rep. Gamey Bies, Rep. Ted Zigmunt, and Sen. Alan Lasee.

Gary.

Richard J. Wegner, Chairperson

Attest:

Frank A, Hlinak, Clerk

p.2

Submitted to: PUBLIC SERVICE COMMISSION OF WISCONSIN

Docket no. 1-AC-231

Draft Chapter 128 - Wind Energy Systems

Comments by the Town of Cooperstown **Manitowoc County Wisconsin** Resolution 2010-3

The Town of Cooperstown respectfully submit our comments and concerns in regard to the May 14, 2010, draft of the Chapter 128 rules for wind energy systems.

The town concurs and endorses the concerns set forth by the towns of Morrison, Wrightstown and Glenmore, Brown County, Wisconsin - Ref. PSC REF# 133746 and towns of Mishicot, Two Creeks, Two Rivers, Manitowoc County, and towns of Carlton and West Kewaunee, Kewaunee County.

We submit the following for consideration by the PSCW when developing rules for Wind Energy Systems so that public safety and health are preserved.

Setbacks should be taken from the property line of the adjoining non-participants.

Setbacks should be large enough so as not to create shadow flicker or excessive ambient noise on adjacent properties.

Setbacks should be large enough not to create a loss of wind or property rights for adjoining properties.

Decommissioning expense should be backed by a Bond Fund from the developer.

Transportation should also include damage caused to roads from the construction and decommissioning of the wind turbines.

EMS – Emergency Communication Interferent be corrected by the developer in conjunction	
Luxur Dantet	Belling
Town of Cooperstown, Chairman	Town of Cooperstown, Supervisor
Fred Lowers	Tancy Hela
Fown of Cooperstown, Supervisor	Town of Copperstown, Supervisor

Town of Cooperstown, Supervisor

Town of Cooperstown, Clerk

RESOLUTION PERTAINING TO PROPOSED WIND SITING RULE (Wis. Admin. Code § PSC 128.14(3) Noise Limits)

TO THE MANITOWOC COUNTY BOARD OF SUPERVISORS:

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WHEREAS, the Public Service Commission has proposed to create Wis. Admin. Code § PSC 128 relating to the siting of wind energy and has submitted the proposed wind siting rule to the legislature for review pursuant to Wis. Stat. § 227.19; and

WHEREAS, the Public Service Commission has included Wis. Admin. Code § 128.14 pertaining to noise criteria and sub. (3) of that rule that sets an absolute limit for the noise attributable to a wind energy system to no more than 50 dBA during daytime hours and 45 dBA during nighttime hours, even though it acknowledges that "[t]here is information that tends to support a nighttime noise limit lower than a 45 dBA seasonal limit, perhaps as low as 35 dBA year round" and that "there is no definitive evidence to support a specific noise threshold"; and

WHEREAS, the Board of Health is responsible for the health of all citizens in Manitowoc County, has studied the proposed wind siting rule containing the noise criteria, and has concluded that the rule does not set noise limits that adequately protect the public health; and

WHEREAS, Manitowoc County established a Wind Energy Systems Advisory Committee to study all aspects of siting wind energy systems prior to adopting a wind energy systems ordinance; and

WHEREAS, the Wind Energy Systems Advisory Committee studied the issue of noise, examined the regulations adopted in other jurisdictions in the United States and abroad, found that a 5dBA increase in the sound level was clearly apparent, and recommended the adoption of a relative, rather than absolute, noise standard in order to best protect the public health; and

WHEREAS, the Manitowoc County Board of Supervisors concluded that an absolute noise limit did not adequately protect public health and established a relative standard that limited the noise generated by the operation of a wind energy system to no more than 5 dBA above the ambient noise level as measured at any point on property adjacent to the parcel on which the wind energy system is located; and

WHEREAS, Manitowoc County concurs with the U.S. Environmental Protection Agency's finding that "noise is a significant hazard to public health" and finds that an absolute noise limit fails to adequately protect the public health;

NOW, THEREFORE, BE IT RESOLVED that the Manitowoc County Board of Supervisors finds that Wis. Admin. Code § PSC 128.14(3) pertaining to noise limits fails to adequately protect the public health; and

2010-HD-9B - 09/16/10 - 13:13

DAVID KORINEK MANITOWOK CHY BRO
1316 ROCKLEDGE RO
MISHICOT WI 54228 920-901-7388

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42 43

BE IT FURTHER RESOLVED that Manitowoc County Board of Supervisors directs the county clerk to send certified copies of this resolution to the President of the Wisconsin State Senate, Senator Fred Risser, and to the Speaker of the Wisconsin State Assembly, Representative Michael Sheridan, for referral to the standing committees that are reviewing the proposed rule; and

BE IT FURTHER RESOLVED that the Manitowoc County Board of Supervisors strongly recommends that the Legislature's standing committees object to the rule as proposed and take such action as is necessary to require that the Public Service Commission promulgate a rule that adequately protects the public health by establishing a relative standard that limits the noise caused by the operation of a wind energy system to no more than 5 dBA above the ambient noise level as measured at any point on property adjacent to the parcel on which the wind energy system is located.

Dated this 21st day of September 2010.

Respectfully submitted by the Board of Health

Andy Schneider, Chair

LEGAL NOTE:

Reviewed and approved as to form by Corporation Counsel. 58

No. 2010/2011 - 49

RESOLUTION PERTAINING TO PROPOSED WIND SITING RULE (Wis. Admin. Code § PSC 128.14(3) Noise Limits)

I respect the prerogative of the members of the Manitowoc County Board of Supervisors to voice their opinions on legislative issues. Therefore, it is my practice to neither approve nor veto a legislative policy resolution that has been enacted by the County Board in order to allow the County Board, acting as the legislative branch of county government, to freely express its sentiment on legislative and public policy issues or to request action by a governmental entity, or both.

Bob Ziegelbauer, County Executive

2010-HD-9D - 09/16/10 - 13:15

No. 2010/2011 - 49 Manitowoc Voting System Vote Summary Report 09-21-2010

All Reports Report , 1A , 2/3 Majority Based on Attendance

1A. Resolution Pertaining to Wind Siting Rule.

Seat	Dist	Attnd	Name	Aye	Nay	Abs
1	15	*	Wagner, Catherine E	[x]	Г 7	r 7
2	11	*	Vogel, Randy S	[x]	ÌΪ	ΪÍ
3	3	*	Metzger, Rita	[x]	ÌΪ	Ìί
4	18	*	Muench, Mary	ĺχj	řί	řΪ
5	17	*	Maresh, Susie	ΪΧΊ	ΪÍ	ř 1
6	4	**	Brey, jim	[x]	ĪΪ	Ìί
7	21	*	Gerroll, Rick	[x]	וֹז	Ìί
8	20	*	Hoffman, Chuck	ĪχΊ	ĪΪ	Ìί
9	2	*	Schmidt, Kevin	ΪĨ	ΪĪ	ΪĪ
10	7	*	Vogt, Norbert A	[x]	Ìί	Ìί
11	14	*	Konen, Faye	[x]	Īί	ĪΪ
12	12	*	Behnke, Kevin	[x]	ĪΪ	ĨĨ
13	16	*	Schneider, Andrew	[x]	ΓĪ	ΪĪ
14	1	*	Rappe, Edward C	ĪΧĪ	וֹ זֿ	ĪΪ
15	5	*	Dufek, Gregory	ĨΧĪ	ĪΪ	וֹ זֹ
16	23	**	Henrickson, Rick	ĪχĪ	Ī.]	ΪĪ
17	10	*	Markwardt, Don	[x]	ĪΪ	ĨΪ
18	9	*	Panosh, Joseph	[x]	ĪĪ	֓֞֞֝֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓
19	6	*	Hansen, Paul B	[x]	[]	ĪĪ
20	19	*	Korinek, Dave	[x]	[]	[]
21	25	*	Burke, Laurie	[x]	[]	ĒĪ
22	24	*	Weiss, Don	[x]	[]	[]
23	22	*	Bauknecht, Michael	[x]	[]	[]
24	13	*	Waack, Melvin	[x]	Ĺĺ	[]
30	8	Chair 	Tittl, Paul	[x]	[]	[]

Pass

On this 21	. day o	f Septembe // 20	10 by	a vote of:
Aye = 24	Nay =	0 Abs ≠ Ø	Abse	nt = 0
				Anto
Attest:		\ pv_		
		Jamie Au	ι 1 7/ κ, ΄	County Clerk

Health Effects We Feel From Living Near Industrial Wind Turbines

13 year old son -: Can't sleep or interrupted sleep, headaches, tells us and teachers "It feels like my head is spinning 100 miles an hour. In general more anger than in the past. Most nights sleeps with one radio and some night two radios running to cover the turbine sound.

wife:- Headaches, lack or loss of sleep – often up in the middle of the night to read and try and get tired again due to either direct sound from the turbines or low frequency noise not heard but felt by the body. Ringing and buzzing in the ears. In early April, 2010 we went on a vacation to Montreal, Canada. It took 4 to 5 days for the ringing to go away. We came home after dark. When we turned on to our road she said, "The ringing is back". Updated July 19th, 2009. After being to the Dr. in January and advised to watch blood pressure went back today as it has been continuing to climb. Also gaining weight. Dr told my wife, lack of sleep will cause both of these issues. Now she has been prescribed a sleep aide to see if this will help first. If not then I will need to go on blood pressure meds. Also she (doctor) said that lack of sleep can cause heart disease and fibromyalgia. We know some people who have that and I certainly do not want this.

Gerry: -Tenseness, anxiety, occasional headaches (in the past rarely got headaches), light headed, unusual feeling in the base of the neck, nausea, anger (that elected officials have allowed this to happen) (anger from the constant sound), lack of motivation, tired most of the time, having trouble remembering names and facts, lack of feeling happy, not dreaming at home. Only dream when away from the wind farm which would show not getting into deep sleep or REM sleep. Added April 9th, 2009 Recently I have been experiencing chest pains. When I go away for a few days the chest pains go away. Crackling or hissing in my ears is now constant. I also have been gaining weight, especially the last month. In all 26 pounds since the turbines began turning even with eating less and not in the late evening. At question is my cortisol which I hope to have checked soon. Updated August 17, 2009: On Friday 8-14-9 I received the results from my Dr. from my cortisol check. I was told it is moderately high and recommended that I see an endocrinologist for further testing. I have now gained 27-37 pounds. During the worst sleep deprivation (July 29, 2009) my cortisol level was 254. It should be less than 100. On October 19th after all 86 turbines were shut down for almost 21 days and noticing that I had lost 17 pounds, I again tested my cortisol level and found it to be 35. More recently I get about 2 hours sleep a night. After that I am either consciously awake or toss and turn. When YOU get a normal nights sleep you don't even think about the chemical changes and nourishment your body and brain during sleep. Now that my sleep is deprived I am learning. Those affects you can read about in other documents I will submit. One is from my federal health insurance while looking for an approved endocrinologist due to my high cortisol level. Updated 6-20-2010. I have blood tests about every six months to most specifically check thyroid levels but other tests as well. This is the first time that my glucose level was above standards and a concern to my Dr. Diabetes is one of the diseases connected to sleep deprivation. Yes, I am concerned.

Our dog – He will walk down the sidewalk and look at the turbine because of the noise. I have commented to my wife and oldest son that "Trigger is acting like an old dog (he is 7) he walks around slow, sleeps a lot and does not have much motivation". When I finally admitted and wrote down my motivation issues I realized our dog was experiencing the same.

This is due to five industrial wind turbines being erected within ¾ of a mile from our home. One is 1560', one 2480', one is ¾ of a mile and 2 are 5/8 of a mile. Occasionally I hear one to the east 7/8 mile away and one directly south 1 mile away. Sometimes the first three mentioned are equal in sound and can be heard inside the house sometimes in all rooms. Some say, "You can hear the train or you can hear traffic and that is not a problem". That is correct. That is not a problem, but the large, loud, industrial wind turbines emit a different sound, a constant sound that does not go away and a

low frequency sound that penetrates the house and body that sometimes the body does not consciously hear, but feels.

You maybe know of Dr. Nina Pierpont. http://www.windturbinesyndrome.com/. Most of the symptoms listed above we were experiencing before we even knew of Nina and her work.

On March 3 of 2008 I went out the door of our house and heard the sound of a jet flying over. It was not a jet. It was turbine #4 of the Invenergy industrial wind farm. The sounds we hear are at times like those not in the terminal at O'Hare airport, but if you were outside of the terminal hearing the sounds of jets taking off and landing. Sometimes the sound is not quite as loud and that of just a jet flying over, but never going away. The sound just continues. Sometimes it sounds like one or two Chinook helicopters lifting a heavy load. Turbines 4 and 73 are especially annoying at this sound. Remember they are 1560' & 2480 away respectively. Sometimes turbine 6 gets involved with the same sound. Turbine 6 is 3¼ mile away. Often turbine 6 is louder than turbine 4 and 73. Therefore I believe wind turbine siting needs to be at least 1 mile from a residence. Some in the medical profession feel 2km or 1.2 miles is a safe standard. Inside our home the thumping sound is loud and sounds similar to listening to your heart in a stethoscope. Sometimes it is just the whooshing sound. All these sounds are unacceptable and have completely taken away our quality of life.

The states sound standards are completely unacceptable. No one in the capital will answer the question who wrote the states model for wind turbine siting. Did Invenergy write them with the PSC's rubber stamping? Why is 50 decibels OK? It is not. It is way too loud. Sound pressure on the ears is not linear, but logarithmic. That means it is similar to the scale for measuring earth quakes. A small increase in the decibel reading is a large increase in pressure on the ears.

Wind energy is terribly inefficient. The 2nd quarter of 2008 the Forward project by Invenergy was 28% of it's capacity. The 3rd quarter only 17.5% of it's capacity. Mr. Andy Hasselbeck the project manager for the Johnsburg Blue Sky project told me personally (project open house 2009) that wind turbines are designed to be 27-30% efficient. Why in the world are our legislators and government promoting such inefficiency while at the same time forcing car companies to increase there café standards?

It is very frustrating to hear the energy companies tell residents that the turbines make very little noise, can be barely heard at 1000' away, make about as much noise are your refrigerator, not any louder than a conversation, sound like the wind blowing in the trees, sound like the waves on the ocean, that shadow flicker is minimal or can ("can" but isn't) be eliminated and actually increases property values and government leaders believe that BS. Lies, lies, lies. When the residents that are affected tell what life is really like in a wind farm they are called NIMBY's, put down and ridiculed. That is so frustrating. I have listed the sounds of living in a wind farm. Shadow flicker to many residents is a terrible issue. I can take you around showing you homes that have been for sale over a year, some with price reduced signs on them. No one wants to live in a wind farm. There are a variety of homes in this project for sale. Why don't energy company employees, renew Wisconsin members and legislators buy some of these homes, stimulate our neighborhoods and see what life is like living in an industrial wind farm.

Wind energy will only produce one to two percent of our energy needs and is exorbitant in cost. If it is a viable source of energy take away the tax incentives, the

production credits and other tax payer resources and see where private industry takes wind energy.

Renewable portfolio standards were voted on by our legislature in a hasty manner with no regard for potential health affects caused by industrial wind turbines. These renewable portfolio standards need to be reduced not raised and a moratorium on wind factory construction enacted until all the negative health affects can be solved. Lies spewed from wind company mouths need to be evaluated and ignored and victims of wind factories need to be listened to and not denounced.

It's difficult to tell you all the affects of large industrial wind turbines in only three minutes for something that has been going on for two years, 7 months and 10 days. I will submit more in written testimony.

I am Larry Wunsch's alternate on the wind siting council attending all but 3 of the early meetings I want to touch briefly on a few items I saw and heard or did not see or hear at the wind siting council meetings. It was obvious that at least 7 of the members have a direct financial interest in siting wind turbines and they were being allowed to make the irresponsible rules adopted in August by the PSC.

Near the end of one of the council meetings Larry Wunsch explained that he volunteered for the council to bring his first hand experience before the committee and went on to explain his thoughts on the loud sounds and shadow flicker due to a turbine being placed 1100' directly west of his home. He went into much more detail than I am also talking about property value protection etc and trying to help with guidelines so others don't have to endure what we are. When he finished with his last word Chair Dan Ebert said, "Do I hear a motion to adjourn"? Do I need to say how rude this was? Not even an acknowledgement of Larry's plight.

No discussion ever took place on the high cost of wind energy and the large subsidies and production credits given to this industry.

There was no discussion on the gross inefficiency of wind turbines nor that they are designed to be 27 to 30 percent efficient.

Wind is free and emission free. No discussion took place on the energy and emissions to dig the ore and smelt it. What about transportation road building and machinery running all night in winter.

Completely ignored were the wind ordinances adopted by Wisconsin towns and counties that were concerned about the health and safety of their residents.

One siting council member and energy company owner on numerous occasions told about that train that runs near his home. One member told about her friend in Milwaukee that lives near the interstate and airport. Trains, planes and traffic sounds have nothing in common or compare to the audible and inaudible sounds of large industrial wind turbines.

What I did not see at the siting council conclusion was any protection what so ever to the residents of Wisconsin of future wind projects. This is very disappointing.

Yes, I live in a wind factory. The Forward project by Invenergy. I was not anti wind as one council member wrote about me. In fact after the first informational meeting put on by Invenergy I was trying to think of a way I could get one on my 6 acres of land. I was neutral, naïve and ignorant until March 3, 2008 when turbine 4, 1560' directly north of my house began turning. I have 5 turbines within 3300' and 11 turbines within a mile.

Health: Within days my wife and then 13 year old son began having headaches and not sleeping well. At least I was sleeping. It was later that I realized I no longer had dreams unless I was away from home. Soon after the turbines began operation I lost my motivation and had trouble making calculations that in the past were simple to do. I was angry and tense and some days would take 2 or 3 naps to try and recoup my lost sleep and feeling of exhaustion.

In spring of 2009 I realized I was gaining 6 to 7 pounds, leveling off for a while then gaining again. I ate less to combat this and no snacks late at night yet this pattern continued. A doctor suggested I have my cortisol level tested. On July 27, 2009 I did the test. The Mayo Clinic does the evaluation. The level should be less than 100. Mine was 254. In all I gained about 35 pounds. In late September, early October all 86 turbines shut down for 21 days. I realized I had lost 17 pounds so the day after the turbines began turning I checked my cortisol level again. It was 35. From 254 to 35. In Green Bay Dr. McFadden stated cortisol levels are inconclusive. What in the world does it take to get an epidemiological study going to study all the complaints about health issues from people living near large industrial wind turbines. World wide where ever there are turbines there are health issues. How can this keep being swept under the carpet?? Lives are being ruined.

Siting standards of 2640 feet from property lines and a sound level of 5 dba above ambient are a big compromise as noted doctors and other specialists are recommending one mile or more.

Additional information:

Council member Dwight Saddler lives ¾ mile outside the Blue Sky Green Field wind factory. He stated that he does not have any affects from the single turbine near him. That gives a strong indication that ¾ of a mile should be a safe set back to homes.

Concerning my dreaming. When we go on vacation I even dream in hotels 100' from the interstate right of way or near airports. Again, there definitely is a different affect from large industrial wind turbines compared to cars, trains and airplanes.

I have blood work done about ever 6 month due to a low thyroid level and elevated blood pressure. I am on medication for both. Sleep deprivation causes diabetes, heart disease, fibromyalgia, high blood pressure and weight gain. My last 2 blood tests my glucose level was 109 (should be less than 100). That seems to be heading toward diabetes. Yes, I am eating very little sweets. I have a crackling in my ears that I never had before. My wife has a loud ringing in her ears that is 2 octaves above middle C.

My father has essential tremors. It can be misdiagnosed at Parkinson's disease. This is hereditary. I have had minor shaking in the past, however it is getting more noticeable. My wife just showed me a fact sheet on essential tremor in which it states sleep deprivation or fatigue causes symptoms to be worse.

I am concerned. My tremors or more severe and my glucose level has become more elevated.

Patch work of regulations; How angry this term makes me feel. Towns and counties around the state have many ordinances (non wind related) different from the township or county next to it. Wind companies and legislators should not be using this term unless they are going to take over local control on all other ordinances.

Submitted by Gerry Meyer W6249 County Road Y Brownsville WI 53006-1103

To be submitted for the record for the Senate Public Hearing October 12, 2010

Senator Jeff Plale Chairman of Senate Committee on Commerce, Utilities, Energy, and Rail P.O. Box 7882 Madison, WI 53707-7882

Senator Plale:

I live in the township of Glenmore. I am in an area where industrial 492 foot wind turbines are up and more being erected.

I am against and protest the overpowering dominance of wind supporters on the wind siting council, the state PSC. Please refer to the Minority Report. For fair, complete, and honest representation we need impartial committee members who are not executives (within companies and organizations) who document in print their sole purpose is to site wind towers. Do we still have conflict of interest laws?

Please hear my voice that the minimum setback from PROPERTY LINES needs to be at least ½ mile for safety, health, and to avoid property take over.

Respectfully,

Glen F. Peotter

5706 Big Apple Road

DePere, WI 54115

920-864-7640

ng.p@hotmail.com

State of Wisconsin

County of Brown

On this day Glen F. Peotter, personally appeared before me 10-12-2010 to me known to be the person described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his voluntary act and deed, for the uses and purposes therein mentioned.

Notary's Signature

Notary's Expiration

Notary's Seal

WE ARE AGAINST THE WIND TURBINES IN OUR TOWN AND SURROUNDING TOWNSHIPS FOR HEALTH AND SAFETY REASONS.

Karl Ihlenfeldt

Luella Ihlenfeldt

Luella Ihlenfeldt

Luella Ihlenfeldt

Hy W

Grealet, WI 54126

State of Wisconsin

County of Brown

Signed in my presence this 12th day of October 2010 by Karl and Luella Ihlenfeldt.

MARY J. DEBERRY

Mary J DeBerry, Notary Public

My commission expires 10/02/2011

Senate PUBLIC HEARING

Committee on Commerce, Utilities, Energy, and Rail

Clearinghouse Rule 10-057
Relating to the siting of wind energy systems.

As I lie in bed throughout last night I couldn't help but to wonder how many more peaceful nights I will be able to enjoy in my own home. I can't believe people like Jennifer Heinzen who referred to us as "collateral damage" is making decisions that will directly affect me and mine. She was also quoted as saying she didn't know why people are so against these wind projects but "it doesn't matter what they think." The Wind Siting Council is loaded with bias as most of the members have a financial gain in the wind industry. This fact must be considered. These are the people that are blatantly ignoring the safety and health issues that are pouring in daily from projects all over the world. I have seen photos and videos of turbines exploding, breaking, and catching on fire. There are issues with shadow flicker, ice throw, noise and each and every one of these issues could be curtailed with a more reasonable setback distance of no less than 2640 feet from PROPERTY LINES.

If I had a dog that was a nuisance to my neighbor, I would have to do something about that dog, like get rid of it. And yet, these turbines — which have been proven to my satisfaction to have tremendous health and safety risks are being allowed to be built too close to my home. The setback in the current rules MUST be increased to alleviate these issues. The World Health Organization has deemed safe noise levels in RURAL communities to be 35 decibels during the day, 30 in the evening, and 25 overnight. To say 45 and assume it's just a "little louder" is not correct. 45 decibels is TWICE as loud as 35 decibels. I live in a rural community, not an urban one. I've heard mention of compensation for people with issues. I do not want money for these issues. You cannot "pay" for my health and safety. That is a price only I could pay and it's because of decisions you are making. You must consider the safety and health of the residents of Wisconsin and err on the side of caution. You are elected officials and are here to represent the citizens of the state, not the special interest groups.

On this day _______ personally appeared before me, ______ to me known to be the person described in and who executed the within and foregoing instrument, and acknowledged that he/she signed the same as his/her voluntary act and deed, for the uses and purposes therein mentioned.

Notary's Signature

2889 Wayside Road, Green leaf, WI. 54126
Representing the Town of Holland trees fd@gmail.com
My name is Steve Deslauriers and I am here representing the Town of Holland in Brown County.

I will go through key aspects of our ordinance that were not adequately addressed by the Wind Siting Council. These omissions pose a public health threat to our residents.

SETBACK DISTANCE: Despite residents' calls for larger setbacks, we chose a setback from 'occupied structures' of 2640 feet. At that distance, the adverse affects of industrial wind turbines are substantially reduced for MOST people. Siting ANY closer than 2640 feet is grossly negligent and not "in the public interest considering ... individual hardships ..." Wis. Stat. § 196.491 (3)(d) 3. This statute being a REQUIREMENT before the PSC of WI can grant the authority to construct an industrial wind project. It was also agreed upon as a group that the setbacks should be from property lines, but we chose not to include that as we felt our ordinance is more legally defensible by regulating setbacks from homes as that measure has a direct correlation to the current jurisdiction of the township - the power to regulate based on human health and safety. The Wind Siting Council was not bound by this restriction and the majority pushed through deferential siting requirements (1.1 times the height to property lines and 3.1 times the height to homes) essentially stealing property from non-participating neighbors to be used as safety buffers for the project. This, more than anything else, has ripped communities apart across this state. My community is no different. This taking of property pits neighbor against neighbor, brother against brother, because it is so wrong.

SOUND MODELING AND SOUND-RELATED ENFORCEMENT PROCEDURES: Equally important as Sound Limit requirements, are the guidelines to accurately measure sound. The procedure written in our ordinance (pages 53-63) is built following ANSI guidelines (ANSI/ASA S12.9-1993/Part 3 [R2008] - American National Standard Quantities and Procedures for Description and Measurement of Environmental Sound). It is far more accurate and repeatable than the cursory and wholly inadequate requirements spelled out in the PSC's existing "Measurement Protocol For Sound And Vibration Assessment Of Proposed And Existing Electric Power Plants". Relying on the current measurement protocol used by the PSC will undermine any standards ultimately put in place. Sound experts across the state have taken issue with this process stating that it does not accurately measure the impact or quality of Wind Turbine Noise. And worse it does not recognize or measure dBC weighted infrasound - the type of noise that appears to cause many people health issues. This measurement protocol must be addressed to ensure that the standards put forth are safe and accurately followed.

GROUNDWATER PROTECTION: I believe the biggest issue with the rules that the Wind Siting Council forwarded to the legislature is that they completely ignore variations in topology, geology, and wind resources across the state of Wisconsin. These variations impact how industrial wind turbine development impact people. One of my community's biggest concerns is the threat to our groundwater that the construction of 100 turbines and the associated 81 miles of buried cabling across fields where large quantities of industrial and agricultural waste is spread will have. The proposed construction places about half the turbines directly on or adjacent to karst features and buries electric lines across many more. We live on the Niagara escarpment where our water is constantly threatened due to the fragile ledge rock that we live on. The strongest wind in Wisconsin (on land) is along this formation commonly called "the Ledge" (where the US Department of Energy still classifies the wind development potential as "poor to marginal"). This is the target location of wind developers and, as such, the PSC needs to recognize that the geology of the Escarpment makes it very susceptible to ground water contamination due to the highly fractured rock and thin soils. Between 2002 and 2007, over 30% of the private wells tested within neighboring Calumet County were found contaminated with coliform

Committee Members

My name is Dave Hoerth and I am a Supervisor for the Town of Stockbridge in Calumet County. I encourage you to send the proposed standards back of the PSC for further review. I feel the setback standards should be based on neighboring property lines not residents, the current proposal of setback standards is a taking of land values; no consideration is given for the land between the turbines and residence, these are potentially saleable lots which would be devalued with the current proposal. In neighboring Fond du Lac County residential property values have declined as much as 43% because of their proximity to turbines and the land between turbines and residents has become worthless. I feel a setback of fifteen hundred feet from a neighboring property line would be a workable standard and give neighboring property owners some protection from issues associated with turbines. The Town of Stockbridge was one of the first Towns in Wisconsin to adopt their own wind ordinance based on the real concerns of our residence. Thank you of considering revising the proposed standards.

Dave Hoerth

Supervisor, Town of Stockbridge

Calumet County, WI.

Oct. 13, 2010

State of Wisconsin
Wind Siting Rules
Public Hearing
Clearing House Rule 10 - 057
Senators Committee on Commerce, Utilities, Energy and Rail

Dear Senators.

Please consider having greater setbacks than in the current draft rule by the wind turbine siting council and Public Service Commission. As Dr. McFadden has said the World Health Organization has recently changed night time limits to 40 decibels. That 40 decibels should be measured so the neighboring homes would be able to have windows open and not have to run air conditioners. Also ambient noise can make a great deal of difference such as dropping a book in a quiet library compared to dropping a book in a noisy school locker hallway.

Unfortunately, there are many people in wind turbine farms here in Wisconsin, Nationally and other Countries with major health problems caused once the wind turbines were erected such as sleep deprivation. Please consider that this has caused health problems and individual financial ruin from having wind turbines too close to homes so it is important to have the proper setbacks. Please include a fair property value guarantee. Many adjacent land fill residents have property value guarantee.

I am also concerned about the bats. Ledgeview Nature Center south of Chilton promotes bats and there are bats in the caves yet the wind developers have proposed several wind turbines within approximately one half mile. We Energies study on the 88 turbines in Blue Sky Green Field wind industrial park reported that 7,000 bats were killed in the first two years.

Please listen to the people that will be testifying with the associated health problems because these problems need to be corrected before more people are affected and the 40 decibels of WHO is being ignored. Public or Common good should be for all involved in a wind turbine industrial park especially the ones living next to them.

Would it not be more cost effective to properly site the wind turbines than to have to correct problems by feathering or stopping them resulting in even less than 27% capacity claimed on production? Many areas are just too populated and Wisconsin is not a very windy state. Health & Safety should be the number one priority. Please consider 1/2 mile setback or 5 decibels above ambient and at the very least 40 night time decibels to avoid sleeping problems.

Thank you for your time and consideration.

Richard & Grace Kunz Chilton, WI 53014

920-849-4894

JERILYN J. FLETCHER 6215 County Rd. W, Greenleaf, WI 54126 920-864-7262

email: jerilynfletcher@centurytel.net

October 12, 2010

Senator Jeff Plale, Chairman Senate Committee on Commerce, Utilities, Energy & Rail P.O. Box 7882 Madison, WI 53707-7882

Re: SUBMIT FOLLOWING INFORMATION FOR THE RECORD FOR THE SENATE PUBLIC HEARING COMMITTEE ON COMMERCE, UTILITIES, ENERGY AND RAIL CLEARINGHOUSE RULE 10-057 RELATING TO THE SITING OF WIND ENERGY SYSTEMS

Senator Plale:

I live in the Town of Glenmore (Wi), where the Shirley Wind Project is currently being constructed. There are 6 turbines just put up very close to my home with more on the way. I am a widowed senior citizen and have lived in my present home located in what use to be beautiful rural Wisconsin for 25+ years.

I DO NOT WANT TO DIE SURROUNDED BY WIND TURBINES AS A SCIENCE EXPERIMENT FOR CORPORATE GREED!!!!!!!!

Sincerely,	A - A			
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Jerilyn J. Fletcher				
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State of Wisconsin				
County of Brown		*		
in land				
On this day	\mathcal{O}	- personally app	eared before me),
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(Notary & Ocar	KERRI J SCHMIDT			
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Notary Public State of Wisconsin

Senator Jeff Plale Chairman of Senate Committee on Commerce, Utilities, Energy, and Rail P.O. Box 7882 Madison, WI 53707-7882

Senator Plale:

Please reject the wind siting guidelines written by the wind siting council and accepted by the PSC. I do believe the wind siting council has been very **one-sided** in favor of the wind power industry and **not representive** of the people of Wisconsin that will be affected by such developments. Again, please reject these guidelines as written and have them start over with a fair and unbiased wind siting council.

I would like this submitted for the record for the Senate PUBLIC HEARING, Committee on Commerce, Utilities, Energy and Rail, Clearinghouse Rule 10-057, relating to the siting of wind energy systems.

Sincerely,

Mark Beyer

2972 Wayside Rd. Greenleaf, WI 54126

920-655-1686

umbeyer@hotmail.com

State of Wisconsin County of Brown

On this day October 12,2010, personally appeared before me, Make Bey we to me known to be the person described in and who executed the within and foregoing instrument, and acknowledged that he/she signed the same as his/her voluntary act and deed, for the uses and purposes therein mentioned.

Notary's Signature

Notary's Expiration Date

Notary's Seal

David L Vercauteren 3410 Park Rd Greenleaf,Wi 54126

To whom it may concern

I think you should have a special meeting for the people who have been forced to live and suffer in these Industrial Wind Turbine Farms and this way you could get a true input on them and how their lives are affected before you decide to ruin anymore lives with these ridiculous setbacks. We have had enough experiments done in Wisconsin that you should have learned from those mistakes. We keep telling you the setbacks should not be any less then ½ mile from the nonparticipant's property lines. That way it may be a little safer and you will not be stealing anyone else's property. The value of our homes will still be worthless because no one wants to live near a wind farm, so even at a ½ mile we lose. Who's going to pay us for all our losses? The government, the wind energy companies or the land owns, which one, can you give me a answer to this question?

Wisconsin citizens that do not want these wind projects near them need to be protected from the destruction these wind energy companies are doing to all our communities. They do not care who they destroy as long as the money rolls in. If the government isn't going to protect us then who will? I'm hoping through this hearing someone truly is listening and stops all the wind projects before Wisconsin is totally destroy of it's beauty. We do not need any more citizens of Wisconsin to suffer.

Thank you for your time David L Vercauteren

State of Wisconsin County of Brown

On this day 10/12/2010, personally appeared before me, Dowledged that he/she signed the within and foregoing instrument, and acknowledged that he/she signed the same his/her voluntary act and deed, for uses and purposes therein mentioned.

Notary's Signature

Notary's Expiration Date

Notary's Seal

Joanne E Vercauteren 3410 Park rd Greenleaf, WI 54126

To whom it may concern

A few months back I attended a Brown County Health and Safety Board meeting in which they had speakers on some interesting topics such as contaminated water, health and safety issues interviews from people that live in industrial wind turbine farms and a speaker who actually had to leave her home for health reasons. After that meeting and all the knowledge that was given I felt the setbacks defiantly should not be any less then ½ mile from the nonparticipant's property line, not their domain for health and safety reasons. If the setbacks are less then that you are putting Wisconsin citizens in very dangerous situation.

You need to get and study all the knowledge that is out there before you let anymore Wind Turbines go up. We need to put the horse before the cart, not the cart before the horse. Once the turbines are up and you find there are problems it's to late. Don't make anymore communities in Wisconsin the government's Lab Rats; you see we are tired of our communities being ruined.

Remember the safety of the citizens of Wisconsin is what is important, not filling the pockets of the wind energy companies.

Thank you for your time Joanne E Vercauteren

State of Wisconsin County of Brown

On this day 10/12/2010, personally appear before me, January L. Constant Tonne Vercounter to me known to be the person described in and who executed the within and foregoing instrument, and acknowledged that he/she signed the same as his/her voluntary act and deed, for the uses and purposes therein mentioned.

Notary's Signature

Notary's Expiration Date

Notary's Seal



Senator Jeff Plale Chairman of Senate Committee on Commerce, Utilities, Energy, and Rail P.O. Box 7882 Madison, WI 53707-7882

Submitted for the record for the Senate PUBLIC HEARING in regards to Clearinghouse Rule 10-057 - Relating to the siting of wind energy systems

Senator Plale:

I would like to express my objection on the makeup of the Wind Siting Council in regards to Wind Siting Rulemaking Wisconsin Act 40.

The majority of the appointed council group had a pro-wind agenda from the beginning.

- How can the two members who are supposed to represent the public work in pro-wind occupations?
- How does the required UW System faculty member with expertise on the health impact of wind energy systems qualify when he admitted he is a non-expert on the subject?

Nine of the fifteen people on the council have a potential financial gain if these lax rules are put into place as written. The common citizen needs to be and has the right to be heard – which did not happen on this council as comments from those living in a wind turbine ghetto were dismissed as fear mongers.

I ask you to start over with a fair and balanced council and allow all sides of this issue to be heard.

Sincerely, Drevel of Ly

Donald Joseph Ley 2684 School Road Greenleaf, WI 54126 920-339-9489 djley4@gmail.com

State of Wisconsin County of Brown

On this day Other 12th 2 personally appeared before me, Duncid Justin Ly to me known to be the person described in and who executed the within and foregoing instrument, and acknowledged that he/she signed the same as his/her voluntary act and deed, for the uses and purposes therein mentioned.

Notary's Signature

Notary's Expiration Date

Notary's Seal

James G. Fritsche Colleen L. McAllister-Fritsche

Senator Jeff Plale Chairman of Senate Committee of Commerce, Utilities, Energy & Rail PO Box 7882 Madison, WI 53707-7882

Dear Senator Plale:

Sincerely,

As residents in the Town of Wrightstown, we reside within the proposed Invenergy Ledge Wind industrial wind turbine project. We want to express our grave concerns on the following points:

- 1.) Act 40 and the over-powering dominance of wind energy supporters on the wind siting council. We refer the committee to review the Minority report.
- 2.) Based on the effects of current industrial wind projects on humans, the set-back of said turbines should be AT LEAST 3.1 times the height of the turbine from our properties.
- 3.) 45 decibel noise level is too loud for sleep. Noise levels should not be over 5 decibels over ambient or 35 decibels.
- 4.) The State of WI health department needs to complete a study on the present industrial wind turbine projects in order to properly set safer set-backs that incline towards the health and safety of humans, and livestock.
- 5.) We believe that there should be more concern shown by the state as to the effects of these turbines on water, environmental problems such as bat, bird, livestock populations,

Jaynes G. Fritsche	
Colleen L. McAllister-Fritsche	tacke.
Subscribed, sworn and personally came before me a 2010, the above named individuals, to me know instrument, and deposed that the same is true.	on this day of
Susan M. Hoffmann	Notary Public State of Wisconsin My commission expires 7/14/9013

Senator Jeff Plale Chairman of Senate Committee on Commerce, Utilities, Energy, and Rail P.O. Box 7882 Madison, WI 53707-7882

Senator Plale:

I am concerned as a citizen of Wisconsin that the current setbacks of 3.1 times the height of the turbine is not far enough. I feel a proper setback should be 1/2 mile. There are now 6 new industrial turbines over 490 feet tall in the county I reside. When I drive past them I am distracted from road by there size and location. I look at the homes in the immediate vicinity and realize those people will never be able to sell there homes for anywhere near what they bought them for. This is a wrong, and is an act of stealing.

Sincerely,

Curt Skaletski

3232 Wayside Road

Cut / Skalets

Greenleaf, WI 54126

920-419-8898

curts@csquaredmarketing.com

State of Wisconsin County of Brown

Octuber, 12th, 2010 _, personally appeared before me, On this day Cent Ska

to me known to be the person described in and who executed the within and foregoing instrument, and acknowledged that he/she signed the same as his/her voluntary act and deed, for the uses and purposes therein mentioned.

Notary's Expiration Date

Notary's Seal

KERRI J SCHMIDT **Notary Public**

Senator Jeff Plale Chairman of Senate Committee on Commerce, Utilities, Energy, and Rail P.O. Box 7882 Madison, WI 53707-7882

Senator Plale,

The residence of an industrial wind facility need a property value guarantee. Why would the risk of financial loss be placed on the residence instead of the company responsible for the turbines.

If things go bad the resident pays?

The rules passed buy the PSC are allowing turbines to be placed to close to homes. In addition, allowing the setback to be closer to property lines than homes is directly limitting the full use of our property.

Respectfully,

James Klug 3318 Hill Rd. Greenleaf

(920) 621-5662

jimmyklug@gmail.com

State of Wisconsin County of Brown

On this day Ochor 12,20, personally appeared before me,

to me known to be the person described in and who executed the within and foregoing instrument, and acknowledged that he/she signed the same as his/her voluntary act and deed, for the uses and purposes therein mentioned.

Notary's Signature

Notary's Expiration Date

Notary's Seal

Senator Jeff Plale Chairman of Senate Committee on Commerce, Utilities, Energy, and Rail P.O. Box 7882 Madison, WI 53707-7882

Senator Plale:

Please reject the wind siting guidelines written by the wind siting council and accepted by the PSC. I do believe the wind siting council has been very **one-sided** in favor of the wind power industry and **not representive** of the people of Wisconsin that will be affected by such developments. Again, please reject these guidelines as written and have them start over with a fair and unbiased wind siting council.

I would like this submitted for the record for the Senate PUBLIC HEARING, Committee on Commerce, Utilities, Energy and Rail, Clearinghouse Rule 10-057, relating to the siting of wind energy systems.

Sincerely,

Lisa Beyer

2972 Wayside Rd. Greenleaf, WI 54126

920-655-1686

umbeyer@hotmail.com

State of Wisconsin County of Brown

On this day \(\frac{\frac{1}{\fint}{\frac{1}{\f

Notary's Signature

Notary's Expiration Date

Notary's Seal

Senator Jeff Plale Chairman of Senate Committee on Commerce, Utilities, Energy, and Rail P.O. Box 7882 Madison, WI 53707-7882

Submitted for the record for the Senate PUBLIC HEARING in regards to Clearinghouse Rule 10-057 - Relating to the siting of wind energy systems

Senator Plale:

I would like to express my objection with the current proposal of allowing wind turbines to be placed only 1.1 times the turbines height to my property line. I own 11 acres of property on which I currently live. On one side, we currently live in a home with our children. The other ½ of our property has a beautiful pond and a small woods that we have been dreaming of building our retirement home on someday. This dream will never become reality if you allow these turbines to be placed so close to the property line. I am sure that there are many landowners whose land is not currently classified as residential, but they do have dreams of building on their land.

I do not understand the reasoning behind the state allowing a wind turbine company to take away my property rights.

Please change the setback rules to <u>2,640 feet from the property line</u> to protect the health and safety of non-participating landowners.

Sincerely,

Jennifer Anne Ley 2684 School Road Greenleaf, WI 54126 920-339-9489

unifer A dey

diley4@gmail.com

State of Wisconsin County of Brown

On this day Other 12th 2cl, personally appeared before me, Interpreted to me known to be the person described in and who executed the within and foregoing instrument, and acknowledged that he/she signed the same as his/her voluntary act and deed, for the uses and purposes

therein mentioned.

Notary's Signature

Notary's Expiration Date

Notary's Seal

THE W

Q

Senator Jeff Plale Chairman of Senate Committee on Commerce, Utilities, Energy & Rail PO Box 7882 Madison, WI 53707-7882

Senator Plale:

We regret we cannot attend the meeting today in Madison but hope that this letter will relay our concerns about the wind turbines.

We are concerned about ACT 40. It is not fair that there is an overpowering dominance of wind supporters on the wind siting council.

Many people have been diagnosed with health problems directly related to living near wind turbines. Please consider a safer setback requirement, such as ½ mile from a neighbor's property line. The turbines contaminate the environment around us including the ground water supply, the stray voltage in the air, the noise pollution and an overall affect on endangered species.

There is a large amount of noise generated by the wind turbines. 45 Decibels at night is too loud to sleep. It should be 5 decibels over ambient or 35 decibles.

We live in a very happy rural community, where we pride ourselves in the beauty of the nature that surrounds us. We value the earth and the countryside. We work very hard to keep this community happy and healthy for all who live here. Please help us keep this quality of living! Don't pollute our hard earned land with wind turbines.

We are concerned about our property values. They will decrease considerably.

Please give power back to the towns to control these major issues that affect all who live there.

Sincerely,

Genine Nowak 4147 Wayside Rd.

Greenleaf, WI 54126

TOWN OF MORRISON

920-362-6750

genine10schuster@hotmail.com

ROBERT Z FANDREY W

Nutre Public Wisconsin

for Commission Expire -

0-16-12

Dear PSC:

We regret that we can not attend the meeting today in Madison but hope that this letter will relay our concerns about the wind turbines.

We are concerned about ACT 40 and the overpowering dominance of wind supporters on the wind siting council. This does not seem fair.

We are concerned that many people have suffered with health issues with the current setbacks. Please reconsider a safer distance.

Another big concern is the noise. 45 decibels at night is too loud to sleep and should be lowered to 5 decibels.

We are concerned about our property values. They will decrease considerably.

Please take these concerns into account when making your decisions.

Mone a: Schuder

Concerned Citizen,

Dorene Schuster

Town of Holland

Mother Public
Brown County, Wisconsin
Hobert Famus
Robert FAMERY

9-16-12

6 hours of sleep? It's not enough

By Elizabeth Weise, USA TODAY

SAN FRANCISCO — Scientists have good and bad news for hard-driving people who boast they need only six hours of sleep a night.

The good news is a few may be right: Researchers at the University of California-San Francisco have identified a family with a genetic mutation that causes members to require only six hours sleep a night. The bad news? The gene is vanishingly rare in humans, found in less than 3% of people.

INSOMNIA THERAPY: What works, what doesn't? **EXTENDED SLEEP:** May give athletes a boost

So almost everyone who says he needs only six hours' sleep is kidding himself. And the consequences of chronic sleep deprivation are serious, says Clete Kushida, president of the American Academy of Sleep Medicine and director of Stanford University's Sleep Medicine Center. Sleep deprivation has been linked to an increase in motor vehicle accidents, deficiencies in short-term memory, focus and attention. It's also tied to depressed mood and a decrease in the ability to control appetite.

The family members — a mother and daughter with the gene mutation — were discovered by researchers at UCSF studying circadian rhythms, the waxing and waning biochemical cycles that govern sleep, hunger and activity. Neither woman needed more than six to 6½ hours of sleep a night, and yet both were well-rested, healthy and energetic.

"One of them is over 70, always traveling internationally and extremely active. She dances three or four nights a week," says Ying-Hui Fu, a professor of neurology at UCSF.

When scientists examined the pair's DNA, they found a mutation in a gene called DEC2, which governs cell production and circadian rhythm.

The mutation seems to result in people who need much less than the normal eight to 8½ hours that most humans require for well-rested functioning, according to the paper, which is published in today's edition of the journal *Science*. The research by Fu and her colleagues determined that humans and mice that carry the mutation get more intense sleep, as measured by slow-wave electrical activity in the brain, and so they need less of it.

But Fu estimates that only about 3% of the population is likely to have this gene and cautions that most people who habitually get less than eight hours sleep a night are only building up a large, and dangerous, sleep debt.

Fu says her lab is investigating whether it might be possible to mimic the effects of the gene with therapeutic compounds, but she cautions the research is only at the very beginning. For now, the only real answer to true productivity is to sleep as much as your body needs, she says.

READERS: How much sleep do you need per night? How much do you usually get?

http://www.usatoday.com/tech/science/2009-08-13-sleep-gene_N.htm

CONSULTANTS LAB

PAGE 02/02

MAYO CLINIC

Laboratory Service Report

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Laboratory Service Report

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* Performing Site:

Mayo Clinic Dpt of Lab Med & Pathology MCR 200 First St SW Rochester, MN 55905

Lab Director: Franklin R. Cockertti, IH, M.D.

Patient Name MEYER,GERALD R	Collection Date and Time 07/29/2009 23:20	Report Status Final		
Page 1 of 1		** End of Report **		
* Report times for Mayo performed tests are CST/CDT				

Senator Jeff Plale Chairman of Senate on Commerce, Utilities, Energy, and Rails P.O. Box 7882 Madison, WI 53707

Senator Plale,

I have great concerns about the wind ordinance. The rules issued by the P.S.C. [Public Service Commission], are not restrictive enough and I'm against them. The setbacks are too close to property lines. Next using land up to my house as part of the distance from turbine is just not right. The noise level of 45 decibels at night is too loud to sleep. This is a great concern for my safety, health, and well being.

I would like to see more studies done by state health department for safer setbacks on the developing wind tower placement.

This letter is to be part of the record for public hearing being held on clearinghouse rule 10-057, relating to the siting of wind energy systems.

Sincerely,

Clara Pekarek

13033 Saxonburg Rd. Mishicot, WI 54228

Clare Deparel

1911SHICOL, W1 34220

920-755-2263

DEBRA J. ZIPPERER NOTARY PUBLIC STATE OF WISCONSIN

Expires June 9, 2013

To whom it may concern; Substituted and man to below ma this Notary Public, Menhouse Co., State of Wis. My commission expires 12-23-24 el as a property owner en the town of Mishicot, of Maritowoe County, do not feel that the proposed siting rules for wind turbines go far errough in protecting my health and safety, proporty value and surrounding landscape. They are very intrusive, just like Russia trying to put missiles in Cuba. They are not svery green when electricity has to be fed in to them for them to operate These turbrismes need to be at least ; miles from a nonportionpating property line. Plus the constant hum of 45 decibals at night is too loud to sleep. I also feel the P.S.C is made up of two many one sided, politically driven people. Doan ! Islack Thank you. 13033 saxonburg Rd Mishicot, WI, 54228

Senator Jeff Plale, Chairman of Senate Committee on Commerce, Utilities, Energy, and Rail

P.O. Box 7882, Madison, WI 53707

Senator Plale:

I am a farmer from Manitowoc County. I request that the PSC rules in Clearinghouse Rule 10-057 pertaining to wind energy systems be fixed or sent back to the Public Service Commission. These rules are not strict enough. Setbacks should be longer and measured from a property line. My health and safety anywhere on my property: in the barn, in the field, in the yard are all important. I do not want any shadow flicker on my land allowed. I work my land, plant and harvest my crops. This would be annoying and possibly cause problems. I also do not want the ability to aerial spray my crops taken away which is what the turbines would disallow. Low frequency noise needs to be addressed in the rules. I raise steers and the flicker and low frequency noise should not be allowed on my property.

The advisory council that advised the PSC had wind developers and wind supporters on it who had the "green" money as a main priority; not my health, safety, and property rights. I am a Wisconsin citizen and want rules that measure from a property line and place my health and safety as the number one priority.

Respectfully,

George Patek

2706 Benzinger Road

Mishicot, WI 54228

920-755-2894

Commission expires: 2-26-12

Oct. 12, 2010

To Senator Jeff Plale Chairman of Senate Committee on Commerce, Utilities, energy and rail.

I am against the Public Service Commission's Clearing House Rule 10-057, relating to the fighting of wind energy systems. The rules are not strict enough and do not take into account the health of nearby humans and animals. The setbacks should be longer and measured from property lines and not my house, which also has cows pasturing around it.

I am requesting this letter to be part of the public record for the public hearing on the Public Service Commission's Clearing House, Rule 10-057.

Sincerely,

erone Chaus Veronica Pekarek

N585 Town Hall Road

Kewaunee, WI 54216

(920)776-1580

County of Brown State of Wisconsin

Commission Expires 8/7/2011

MW KOSLOWSKY

Senator Jeff Plale Chairman of Senate Committee on Commerce, Utilities, Energy, and Rail P.O. Box 7882 Madison, WI 53707-7882

Senator Plale:

I am writing this letter asking you for your help. Please help the residents of the State of Wisconsin who will be living next to a wind farm. There are too many unanswered questions concerning health/safety issues.

Please change the setback of the turbines. It should be measured $\frac{1}{2}$ mile from the property line.

Thank you for your time,

Sincerely,

Gregory F. Brandt 1903 County H

Cuba City, WI 53807

Carla M. 18aises Exp. 9/30/12 608-144

Senator Jeff Plale Chairman of Senate Committee on Commerce, Utilities, Energy, and Rail P.O. Box 7882 Madison, WI 53707-7882

Senator Plale:

I am writing to you as a life long resident of the State of Wisconsin. I am not against green energy, but when it causes hardship for residents living next to a wind farm -there is an issue.

Please increase the setback to at least 2500 ft from property line. This is not only to protect residents health/safety issues, but also to ensure the resident's property value will not decrease. If the value does decrease, what effect will it have on property tax income??? Ask yourself, what about State revenue???

I was so glad to hear a Wind Siting Council was created, but when I read the list, I thought, how could this be. Too many council members had a direct link to wind farms and...personal gain.

Please help us, the residents who will be living next to the wind farm.

Sincerely

Mary Brandt

1903 County H Cuba City, WI 53807

Oct 12, 2016

J.M. Splutes an 11-11-12

608-744 2145

Nikki Sunday 2839 County Road Q Clear Lake, Wisconsin 54005

October 12, 2010

Dear Sir or Madam:

My name is Nikki Sunday, and I live in Forest Township in Saint Croix County, Wisconsin with my family. In our small township there have been approved plans and contracts to build almost 40-500 foot wind turbines. We are a residential area with a quiet life style. We also have no ordinances to regulate these turbines. I am very concerned with this project, due to the safety and health of Forest residents. There are several issues, but the main ones I am concerned with are the safety set backs, and noise pollution.

Emerging Energies LLC plans for this project were not properly explained to the public, or to the hosts of the turbines. These turbines are far too many in number for our small area, are placed too close to non-participating residents; therefore, posing health and safety risks to the people of Forest. These things take away our right to the pursuit of happiness and simply benefit Emerging Energies.

The State needs to seriously investigate the regulations that the Wind Siting Council is proposing and see that they are not adequate. Please consider the safety, health, and rights, of the people instead of just the hard push for clean energy.

Clean energy is important, but not at the expense of innocent people.

Please do not accept the Wind Siting Council recommendations, because they are inadequate. They do not have the safety of the people in mind; all they have in mind is their bottom line. Their bottoms line is how much they can benefit financially from furthering wind energy. The majority of the people on this council benefit financially from wind energy, and decreasing safety standards. How can this group be out to protect the people? I think there is a serious conflict of interest. These Wind Siting Rules should be rejected and revised with stronger ordinances to protect people. Please protect us!

Carlain Rablam, Notary Polk Co. Wissionein Exp. 12/25/2011

Thank You,

Nikki Sunday

Concerned Citizen of Forest Township