

From: [REDACTED]
Sent: Wednesday, January 02, 2013 11:38 AM
Subject: GMP Renewable Development Fund Comments

Dear Anne,
Attached is a letter to the Siting Commission from the Green Mountain Power Renewable Development Fund Executive Committee. If you have difficulty opening the document please let me know.
Thank you and Happy New Year.
Mike

Michael Raker
Agricultural Energy Consultants, LLC
802-454-0123



December 28, 2012

Ms. Jan Eastman, Chair
Energy Generation Siting Policy Commission
C/o Vermont Department of Public Service
112 State Street
Montpelier, VT 05620

Re: PSB Oversight of Farm-Based Anaerobic Digester Systems

Dear Ms. Eastman:

This letter offers recommendations to improve the regulatory oversight of farm-based anaerobic digester systems by the Public Service Board (PSB or Board). The current PSB oversight encompasses the entire digester operations, including manure management, and creates a nearly impossible structure for farmers to manage their farming operations and comply with the PSB requirements. We recommend that the PSB provide for oversight for farm projects similar to that for landfill electric generation projects which focuses on the electric generation portions of the operations.

On December 4, 2012 Leslie Cadwell Esq. (Gravel and Shea) and Sandra Levine Esq. (Conservation Law Foundation) provided comments to the Energy Generation Siting Policy Commission. During their presentations, both attorneys offered comments regarding PSB oversight of farm-based anaerobic digester systems. Based on their experiences, they recommended changing the scope of PSB oversight of farms with anaerobic digestion electric generation systems by separating farming operations from the Board's oversight of electric generation. The following comments are offered in support of Ms. Cadwell's and Ms. Levine's statements of December 4.

Construction and operation of many renewable energy systems, such as wind and solar projects, are finite and distinct. These projects are finite, because there is a predictable construction start date and completion date. After the facility begins generating power very little change in operations occurs. Similarly, these projects are distinct because the entire project is definable prior to construction. This is not to suggest that plans don't change during construction due to encountering unforeseen obstacles (ledge in the case of excavations, poor soils, etc.). The point is that once a CPG is issued, and facility construction and commissioning are complete, there is likely little need for changes in day to day operations.

In contrast, biomass and biogas systems (including farm based digesters, landfills, and waste water treatment facilities), because they employ the continuous addition of a human-controlled feedstock, require ongoing management and modification. In the case of a farm based anaerobic digester, the principal feedstock is manure generated on the farm. In the case of the landfill and waste water biogas facilities, the principal feedstock is human-generated waste.

All dairy farmers actively engage in managing manure on a daily basis. Manure is both a fertilizer resource and a potential environmental contaminant. Farmers employ many tools (e.g. pumps, gravity, flow gutters, aggregation pits, mechanical mixers, scrapers, and underground piping) to manage manure flow to final storage. These systems require constant monitoring, frequent repairs, modifications and upgrades to maintain their effective functions.

When an anaerobic digester is added to an existing manure management system it must be fully integrated into that system. Manure flows are diverted, and often times treated, prior to entering the digester. After digestion, the manure is routed back into the existing management system. In all cases, the manure must continue to be managed by the farmer on a daily basis to avoid negative impacts to air and water or to the health and welfare of the animals producing the manure.

The PSB has issued CPGs for these farm based systems that regulate the entire digester project including the manure management system. Accordingly, when a subsequent change to the manure handling system occurs, farmers must seek PSB approval of the change. This requirement is both costly and unrealistic in terms of timing. When a farmer encounters a manure flow challenge an immediate corrective action is required. In some cases this corrective action may require a material change to the existing manure management system. Other changes in manure management may occur because new technology/equipment becomes available, or because a farmer increases herd size and constructs a new barn. In one actual case, the engineer-designed manure flow system integrating the digester into the existing manure flow system simply did not function as planned. Manure was building up in the newly constructed reception pit and had the potential to disrupt digester and farm operations. In a crisis, the farm modified the PSB approved manure handling system. The farmer acted out of necessity, acted quickly.

As indicated above, both Leslie Cadwell and Sandra Levine suggested regulatory oversight by the PSB should avoid oversight of the manure management and instead focus on the electric generation portion of digester projects and not the entire digester project. This suggestion is not without precedent. The PSB has issued CPGs to the Coventry and Moretown landfill biogas generation facilities and in both cases limited their jurisdiction to electric generation and to the interconnection to the utility grid. The PSB did not place restrictions on the capture and collection of biogas, the management of waste, or the source and quantity of feedstock accepted by the landfills.

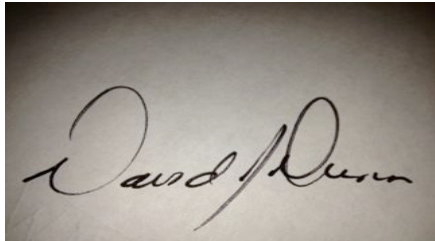
The Executive Committee of the Green Mountain Power Renewable Development Fund has worked in partnership with Vermont dairy farmers since 2003 to assist in the development of farm based biogas to electric generation projects. There are fifteen digesters in operation in Vermont, two additional systems under construction, and one in permitting. To put these accomplishments in perspective, the US EPA AgStar program identified 158 dairy farm anaerobic digesters in operation in the US as of September 2012. Vermont is considered a national leader in the industry.

In the month of November dairy digesters in the GMP Cow Power program alone delivered in excess of 1,500,000 kWh of renewable electricity to the grid. In addition to the renewable power they produce, these systems are having a positive impact on dairy economics while at the same time reducing green

house gas emissions from fossil fuel used for space and water heating and methane releases from manure storage.

It is our hope that as members of the Energy Generation Siting Policy Commission you will include discussion on this issue, including our recommendation to limit PSB oversight to electric generation, in your report to the Governor and legislature in April.

Sincerely,



David J. Dunn
Green Mountain Power



Sandra Levine, Esq.
Conservation Law Foundation



Gabrielle Stebbins
Renewable Energy Vermont



Willard Rowell
Green Mountain Dairy

Andrew Perchlik represents the interests of the Department of Public Service on the GMP Renewable Development Fund Executive Committee. In recognition of the PSD's statutory and regulatory role in addition to its role in the work of the Siting Commission, Andrew has recused himself from signing on to this letter.

Diane Bothfeld represents the interests of the Agency of Agriculture, Food and Markets on the GMP Renewable Development Fund Executive Committee. In recognition of the role of the AAFM, Diane has also recused herself from signing on to this letter.

From: Rob Pforzheimer

Sent: Thursday, January 03, 2013 9:35 AM

Subject: The shocking environmental cost of renewable energy

<http://ontario-wind-resistance.org/2013/01/03/wind-farms-vs-wildlife/>

The shocking environmental cost of renewable energy



Wind turbines only last for ‘half as long as previously thought’, according to a new study. But even in their short lifespans, those turbines can do a lot of damage. Wind farms are devastating populations of rare birds and bats across the world, driving some to the point of extinction. Most environmentalists just don’t want to know. Because they’re so desperate to believe in renewable energy, they’re in a state of denial. But the evidence suggests that, this century at least, renewables pose a far greater threat to wildlife than climate change.

I’m a lecturer in biological and human sciences at Oxford university. I trained as a zoologist, I’ve worked as an environmental consultant — conducting impact assessments on projects like the Folkestone-to-London rail link — and I now teach ecology and conservation. Though I started out neutral on renewable energy, I’ve since seen the havoc wreaked on wildlife by wind power, hydro power, biofuels and tidal barrages. The environmentalists who support such projects do so for ideological reasons. What few of them have in their heads, though, is the consolation of science.

My speciality is species extinction. When I was a child, my father used to tell me about all the animals he’d seen growing up in Kent — the grass snakes, the lime hawk moths — and what shocked me when we went looking for them was how few there were left. Species extinction is a serious issue: around the world we’re losing up to 40 a day. Yet

environmentalists are urging us to adopt technologies that are hastening this process. Among the most destructive of these is wind power. [read article](#)

From: Michael Picard
Sent: Friday, January 04, 2013 10:09 AM
Subject: wind power projects in VT

Hello- My name is Michael Picard (wife-Bonnie) and we are property owners in East Burke and Island Pond.

I want to express my dismay at all the negative press from individuals and especially the town of Island Pond.

Wind power is the future of renewable energy for the entire world. Most of the local people have been told that wind power is not a good thing. This is not realistic.

I strongly urge you to aid any individual or company to expand wind power across the entire state and set an example for all the world to see.

Regards,
Michael Picard

From: Jennifer Baker

Sent: Thursday, January 03, 2013 9:18 PM

Subject: Addison Natural Gas Project

Dear Energy Siting Commission Members,

Although it is not currently included in the executive order creating your Commission, it seems unfathomable that the largest energy project in the state over the next several years is not even going to be taken up or considered by your new Commission. By that I mean the Addison Natural Gas Project just proposed by Vermont Gas Systems. To wait until there is actually a proposal for a natural gas electric generation plant before weighing in on this project is to miss the huge economic, environmental and social impacts that construction of this pipeline will have on our county and our state. As proposed, the route of this industrial, high-pressure pipeline puts it literally in residents' front yards, next to their wells, living rooms and kids' swing sets. As a resident along the proposed route, and with a house and well within 75' of it, I am confounded that in a state with so much undeveloped land, no regard has been given to either the significant public safety concerns or property rights of Vermonters, and that this route was sited in our town with zero input from any resident or town official.

This is only the first chapter of what will be a multi-year, even a multi-decade expansion of pipelines in Vermont. VGS's proposal to site their pipeline partly along town and state roads and right through historic villages sets a very bad precedent, and represents a land grab by a large, private, foreign corporation of our public infrastructure. Gaz Metro was not interested in acquiring our electric utilities for their untapped market potential selling electricity to Vermonters. It bought them for the VELCO utility corridor to run gas pipelines through the state and eventually out through NY and/or Mass, to ship Canadian natural gas to larger markets south of us, and compete with fracked gas from the Marcellus Shale. They should at the very least, be required to stay within this utility corridor, and not be allowed to establish rights to a second one a few hundred feet away, putting some residents in the unenviable position of now having an electric transmission line behind their house and an industrial high-pressure pipeline in front of it. Once the new pipeline is hooked into the national pipeline system, (which Vermont currently is not) jurisdiction for it will fall under FERC, and the state's own ability to regulate where these pipelines go, how large they can be, or even what flows in them will be severely constrained. So that makes it all the more egregious that after buying what is essentially the controlling rights to the VELCO corridor with their almost majority stake, they are diverting from that corridor and trying to establish a second one purely for expediency and to avoid having to get requisite state permits.

Residents of Monkton are 100% opposed to the route as currently proposed through our town, as are residents of the roads in Hinesburg where the pipeline is also sited. I expect that when part 2 of this project, the route to the lake is made public, the residents of Cornwall and Shoreham will be equally upset. We are not happy that to merely defend

our small house lots, wells and historic houses on stone foundations from all the proposed blasting, we now have to engage in a lengthy and expensive legal fight before the PSB.

I hope that one of the recommendations that you give to the Governor when and if he asks for your feedback is that your Commission be given jurisdiction over transmission as well as generation, both electric and natural gas, and that you give the issue of expansion of pipeline networks in Vermont the very serious consideration that it merits.

Thank you for your time.

(Sorry this was too long for the comment page)

Sincerely,

Jennifer Baker
Monkton VT



From: Rob Pforzheimer

Sent: Monday, January 07, 2013 11:39 AM

Subject: Does an industrial scale wind turbine sound like a refrigerator to you?

Does an industrial scale wind turbine sound like a refrigerator to you?

Listen here: <http://www.youtube.com/watch?v=KWyNfN9HJZk>

Wind developers in the state of Wisconsin want to put industrial scale wind turbines that are 40 stories tall 1000 feet from people's homes. That's about 350 steps. They tell us at this distance, these turbines make no more noise than a refrigerator. A similar statement appeared in the National Wind Permitting and Siting Guide 2002. A member of our community wrote the NWCC and asked them if they knew the source since there wasn't a footnote listed with a supporting reference.

They didn't know.

AWEA referenced the National Renewable Energy Lab as the source, so the community member wrote them who tells us, "Even though they were very helpful and put me in touch with their staff noise authority, they could not come up with the author of that statement, however they did copy pages from books that their noise authority called the quintessential references on wind energy and noise.

So, then I Googled it. I typed in the refrigerator statement in question and came up with these statements from the American Wind Energy Association.

Author Tom Gray, AWEA: Today, an operating wind farm at a distance of 200 meters (658 ft.) is no noisier than a refrigerator .

Author Tom Gray: Wind turbine noise (at 200 m) is as loud as your refrigerator heard from the living room.

Author Tom Gray, AWEA . Today, an operating wind farm at a distance of 300 meters (987 feet) is no noisier than a kitchen refrigerator or a moderately quiet room.

Author Tom Gray, AWEA. Today, an operating wind farm at a distance of 350 meters (1151.5 feet) is no noisier than a kitchen refrigerator or a moderately quiet room, to:

Author Tom Gray, AWEA. Today, an operating wind farm at a distance of a quarter of a mile is no noisier than a kitchen refrigerator or a moderately quiet room

Visit betterplan.squarespace.com for more information about wind turbine siting in the state of Wisconsin.

From: Rob Pforzheimer

Sent: Monday, January 07, 2013 11:43 AM

Subject: Health & Windfarms: Experimentation on people without their consent

Health & Windfarms:

Experimentation on people without their consent

In this video, Curt Devlin explains to windfarm neighbours how they are actually being used as guinea pigs without previous information and consent, which constitutes a clear violation of their Human Rights.

Recorded at the Falmouth Conference on Human Rights* - November 10, 2012 -
Falmouth Public Library - Falmouth, MA, USA

* Science, medicine and engineering were called upon to explain the impacts of living too close to industrial wind turbines.

From: Rob Pforzheimer
Sent: Monday, January 07, 2013 12:33 PM
Subject : Outrage over bald eagle nest removal

Please scroll down to the bottom of the article at the link below and vote in the poll.

Should the eagle nest have been removed to make way for the turbine project?

Monday, January 7, 2013

- Yes
- No
- Turbine project should have been relocated



<http://www.simcoereformer.ca/2013/01/07/outrage-in-haldimand-over-bald-eagle-nest-removal>

Outrage in Haldimand over bald eagle nest removal 8

By Monte Sonnenberg, Simcoe Reformer

Monday, January 7, 2013 11:19:18 EST AM

Residents are outraged with the removal of a bald eagle's nest in Fisherville on the weekend. The tree housing the nest was cut down to make way for an access road for the Summerhaven wind turbine project. (Photo courtesy of ontario-wind-resistance.org)

Residents are outraged with the removal of a bald eagle's nest in Fisherville on the weekend. The tree housing the nest was cut down to make way for an access road for the Summerhaven wind turbine project. (Photo courtesy of ontario-wind-resistance.org)

FISHERVILLE - Wind turbine opponents in Haldimand are expressing outrage after a tree with a bald eagle's nest was removed near Fisherville Saturday morning.

The tree was cut down to make way for an access road for the Summerhaven wind turbine project. The Ministry of Natural Resources gave permission for the removal Dec. 31.

Until recently, the bald eagle was deemed a species-at-risk. It has since been upgraded to "a species of special concern" due to the growing number of nesting pairs along the north shore of Lake Erie. The nest destroyed on the weekend was one of 57 identified in southern Ontario in 2011.

"I was there and I witnessed it," Ernie King of Cayuga, vice president of Haldimand Wind Concerns, said Monday. "The MNR is supposed to be protecting nature and enforcing the regulations that are in place. Are we trying to put the eagle back on the endangered list? We can't be playing God with nature."

Wind opponents and others are upset with the process leading to the tree's removal. The permit was issued Dec. 31 with the proviso that the tree would be removed by Sunday. The MNR decision wasn't posted on the Internet until after 5 p.m. Friday. This left no time for anyone to object.

The Summerhaven project is an undertaking of NextEra Energy Canada. Ontario's Environmental Review Tribunal green-lighted the project last fall following a month-long hearing in Hagersville. At issue was the project's potential impact on the environment in west Haldimand.

Officials told King and others at the scene that removing the cottonwood tree at this time of year was the least disruptive option. There were concerns that the three wind turbines slated for the area posed a threat to the breeding pair and their young.

Spectators watching from the road were told the displaced eagles were not in the neighbourhood. However, the homeless pair were spotted in the area on the weekend, as were 16 bald eagles in total during the annual January bird count held in the Fisherville-area.

An on-line petition about the incident has been posted at the Ontario Wind Resistance website. As of Monday morning, it has received 240 responses. The petition, which is directed at the MNR and natural resource critics in the New Democratic Party and the Progressive Conservative Party, says "I, as a resident of Ontario, am outraged at the destruction and ultimate displacement of the eagles and their habitat.

“The mismanagement of the MNR at the request of foreign-based companies in order to erect wind turbines is irresponsible and unacceptable. Additionally, it is an outrage that the MNR posted their decision on Friday, Jan. 4, after 5 p.m., for the distinct purpose of not allowing local residents to express their concerns over this action. Ontarians are watching.”

Monte Sonnenberg
519-426-3528 ext. 150
monte.sonnenberg@sunmedia.ca

Poll

Should the eagle nest have been removed to make way for the turbine project?

Monday, January 7, 2013

- Yes
- No
- Turbine project should have been relocated

VOTE

or view results

From: Rob Pforzheimer

Sent: Sunday, January 06, 2013 10:07 AM

Subject: Greenpeace-WWF wind claims blown away

“wind monsters turbines will do nothing useful for us, will spread environmental harm and above all have only one serious function – of minting money for the undeserving, aided and abetted by the uneducated”

http://www.thecommentator.com/article/2240/greenpeace_wwf_wind_claims_blow_n_away

Greenpeace-WWF wind claims blown away John McCarthy once said, “He who refuses to do arithmetic is doomed to talk nonsense”. Or become politicized tin-shakers pushing absurd “independent economic analysis” it seems WWF and Greenpeace ought to hang their heads in shame.

(Please stop donating to: WWF, Greenpeace, Sierra Club, NRC, VPIRG, CLF, Audubon and other wind shills.)

Peter C. Glover On 11 December 2012

There are some charities to which I would not give a ‘wooden nickel’, and I am a passionate charity giver. Top of the pile: Greenpeace and the World Wildlife Fund for Nature (WWF). If they stuck to the task they were originally set up for things would be different. But they haven’t. Both are today highly politicized groups – as Greenpeace founder Patrick Moore confirms – spending large chunks of donations campaigning on issues about which their sum knowledge could fill the back of a postage stamp. Climate science and associated issues, for instance.

The dynamic duo charity campaigners have just published a new report, A study into the economics of gas and offshore wind, conducted for them by the consultancy Cambridge Econometrics for New Economic Thinking.

A headline from Bloomberg Businessweek which recently covered the publication of the report read: “UK Offshore Wind Better Boost for Economy than Gas, WWF says”. The report suggests that the UK economy would be better off by £20 billion come 2030 if it majored on wind power and ignored gas, especially the UK’s enormous shale gas reserves.

The essence of the report’s key finding is that “large-scale development in offshore wind would impact UK GDP and employment” to “increase GDP by 0.8 percent”. If the rate of current wind farm developments was sustained, the report claims that it would create 100,000 jobs by 2025, “falling to 75,000 by 2030”. Given the current abject failure to create green jobs in any numbers thus far, and the fact, as studies elsewhere conclude,

that green jobs destroy real jobs, not to mention the inability to cut the umbilical cord of public subsidy, that's quite a claim.

But then the claim does depend on a whole bunch of ifs. They include the presence of local infrastructure supply chains; boosting the "import content" of offshore wind projects (i.e. building far more wind farms than are currently planned); and the UK becoming a "major global centre" able to attract investment. The report further assumes that gas prices will inexorably rise and that investment in UK shale gas would only "replace" reducing North Sea gas reserves. We'll take the wind claims first.

The reason the report focuses on offshore wind farms is that onshore turbines are proving an abysmal failure. Wind turbines generally only operate around 20 to 30 percent of the claimed capacity and are hugely unpopular. They also require the costly extra back-up of gas-fired generators to kick-in every time they fail (not least during the coldest periods of the year) and have to be turned off when the wind blows about 30 mph. And all for a paltry power generation return on investment.

No private investor in their right mind would risk their own money to invest in wind power if the government was not guaranteeing market-skewing high prices. Neither does the new report factor in other major costs, such as the considerable investment in the National Grid necessary to accommodate wind's variability.

The report authors should first have read John Etherington's *The Wind Farm Scam* to grasp the inherent and costly associated problems of wind. Etherington is both an ecologist and a specialist researcher into the implications of intermittent renewable electricity generation, especially wind power.

"Wind power is remarkably expensive in capital investment for a given output," says Etherington who goes on to provide a raft of key statistics that reveal just how poor the investment-to-return ratio of wind power is, with offshore proving twice as poor as onshore (p.74).

His book highlights how the UK's energy watchdog Ofgem identifies that the National Grid would require £20 billion of investment, equal to its current capital value – and oddly the same figure by which the report maintains the UK would be better off – "to cope with the dispersed and remote nature of wind power and other intermittents." An impressive array of hard data prompts Etherington to conclude:

"wind monsters turbines will do nothing useful for us, will spread environmental harm and above all have only one serious function – of minting money for the undeserving, aided and abetted by the uneducated".

The reality is it that when it comes to harnessing any potential energy resource this never comes free. The physics of energy density coupled with the economics of extraction, infrastructure costs, support mechanisms, transport and delivery all each need to be factored in. That's precisely why we ditched unreliable and uneconomic wind-powered

sailing ships in the nineteenth century for far more efficient and cost-effective steam power. And we might also note the power generation chaos that Germany's over-investment in renewable wind power has caused after they went down the same path being urged by this new report.

But what of the report's claim that natural gas prices can only rise?

Anyone familiar with the transformation that the shale gas boom is having on the US manufacturing industry and soaring job creation – 600,000 by 2011 alone – and on the economy can only wonder at the reluctance of Europe to pursue the same path. The switch from coal to gas in electricity generation has not only put the US within sight of achieving complete domestic energy self-reliance, but has cut the cost of electricity per se.

As a direct result of the shale gas revolution, Americans now pay half of that paid by Europeans and Britons for their natural gas. And as UK shale gas expert Nick Grealy has consistently shown, shale gas development can only cause UK gas prices to fall. It ought to be a no-brainer.

Britain has world class shale gas reserves, the extraction of which would mean less reliance on imports, significant real (not subsidized) job creation, and a potential £1.5 trillion energy boost to the UK economy. Equally, shale gas would not merely “replace” reducing North Sea gas reserves; they would actually overlap for some considerable time negating even further the need for imports. As I have pointed out elsewhere, new discoveries and new technologies continually make North Sea gas and oil the “gift that just won't quit giving”.

The UK Government is currently considering tax incentives to get the UK shale gas industry under way. That's about all it would need as companies and potential private investors are already champing at the bit having seen the impact of shale gas development in the US.

The simple fact is that the UK has, at the very least, 200 trillion cubic feet of the stuff, as much as is in the North Sea. It would be economically criminal not to exploit it.

Indeed, if the government had not skewed the market to make wind appear commercially ‘viable’ by subsidizing it almost exclusively from government handouts, energy bill-hiking feed-in-tariffs, and forcing power companies to buy renewably-sourced power at artificially guaranteed prices – further hiking energy bills to customers – there would not be any substantial wind power industry. Nor would we be bothering with the absurd claims of the political activists and social engineers masquerading as charity workers at Greenpeace and the WWF.

Fair enough. But at least the Greenpeace-WWF study was ‘independent’, right?

In fact Cambridge Econometrics, which bills itself as providing “independent economic analysis”, is wholly funded by its parent organisation the Cambridge Trust for New Thinking in Economics. The Trust was founded by Dr Terry Baker. Baker is currently the Director of Cambridge Centre for Climate Change Mitigation Research and was a lead author of the UN Intergovernmental Panel on Climate Change’s Fourth Assessment Report in 2007.

Anyone wanting to know what manner of shambolic, incoherent, and highly politicized work actually goes on in the UN IPCC will get chapter and verse from Donna Laframboise’s excellent book exposé. Dr Baker, it transpires, is patently a dyed-in-the-wool global warming alarmist and committed to the cause. He also happens to be chairman of Cambridge Econometrics.

Computer pioneer John McCarthy once said, “He who refuses to do arithmetic is doomed to talk nonsense”. Or become politicized tin-shakers pushing absurd “independent economic analysis” it seems.

Peter C Glover is the International Associate Editor, Energy Tribune and a writer & author on international affairs. For more: www.petercglover.com

From: Rob Pforzheimer

Sent: Friday, January 04, 2013 7:23 PM

Subject: Study suggests wind turbines' low-frequency noise could cause health woes



Study suggests wind turbines' low-frequency noise could cause health woes

Read more: http://host.madison.com/news/local/environment/study-suggests-wind-turbines-low-frequency-noise-could-cause-health/article_835ba89e-5609-11e2-8b02-001a4bcf887a.html#ixzz2H3WaLOO6

DEE J. HALL | Wisconsin State Journal | dhall@madison.com | 608-252-6132

A study released this week found largely inaudible low-frequency sounds in three homes near wind turbines. But only in the home closest to the turbines could the sound be correlated to something outside the home.

When it comes to wind farms, it may be the sound you can't hear that drives you to distraction, according to a report released this week that is pitting environmental groups against one another.

The study of noise levels around the Shirley Wind Farm in Brown County detected largely inaudible, low-frequency sound inside three nearby houses. But researchers found that only in the home closest to the turbines could it be correlated with sound coming from outside the house, according to the report released Monday.

The study concluded that between the low-frequency sound and the nausea, dizziness, headaches, ear pressure and other maladies reported by neighbors "enough evidence and hypotheses have been given herein to classify (low-frequency noise) as a serious issue, possibly affecting the future of the industry."

But the study could not conclude that the health problems reported by nearby residents were caused by the low-frequency sound from the eight-turbine project, according to Clean Wisconsin, a Madison environmental group that arranged the testing.

That's because "there aren't any documented peer-reviewed studies finding any health effects for inaudible sounds," said Tyson Cook, staff scientist for Clean Wisconsin, which favors development of renewable energy.

Duke Energy of Charlotte, N.C., which owns the Shirley Wind Farm, was reviewing the study but had no comment Thursday, spokesman Jason Walls said. Walls added that the facility was "in compliance with all laws and ordinances."

The study was paid for in part with funds awarded by the Public Service Commission to Clean Wisconsin and Forest Voice, a group of homeowners fighting the Highland Wind Farm, a proposed 41-turbine facility in St. Croix County. Both groups have been granted intervenor status in the Highland Wind Farm case before the PSC. Two lawmakers and another group involved with the testing say the study could be groundbreaking. "The report suggests that very low-frequency noise from wind turbines may cause motion sickness-like symptoms in some people," according to a statement from Forest Voice.

Rep. Andre Jacque, R-De Pere, called on the PSC to halt wind turbine construction "to keep this nightmare from spreading." Sen. Frank Lasee, R-De Pere, said in a statement the agency should "immediately establish new set-back requirements that protect the health and wellness of Wisconsin residents who are forced to live too close to these 500-foot-tall" industrial wind turbines.

The four companies in early December studied noise levels at three vacant houses near the Brown County wind farm as part of the hotly contested Highland proposal. The study detected low-frequency sound inside all three town of Glenmore homes, which had been vacated by owners complaining of negative impacts from the turbines.

One of the consultants, Robert Rand of Rand Acoustics in Brunswick, Maine, reported feeling nausea, headaches and dizziness after he spent long hours in the test homes. Rand, who suffers from seasickness, reported the symptoms subsided after about a week.

But only in the closest home, 1,280 feet from the turbines, was the low-frequency sound correlated with noise coming from the outside; state law requires a 1,250-foot separation between turbines and residences.

One of the consultants on the Shirley Wind Farm study, David Hessler of Hessler Associates Inc. of Haymarket, Va., said the study raises questions but offers no definitive answers.

"Nothing was actually discovered that would explain to any degree the health complaints reported by residents," Hessler said, adding that more testing is needed.

The report will be discussed at a Jan. 17 PSC hearing on the Highland application, which seeks permission for a 6,200-acre wind farm in the towns of Forest and Cylon in northeastern St. Croix County

<http://host.madison.com/news/local/environment/835ba89e-5609-11e2-8b02-001a4bcf887a.html>

From: Kathleen Iselin

Sent: Monday, January 07, 2013 4:58

The article below demonstrates why it would be prudent for VT to slow down, step back, and rethink the industrial wind situation, during a 3-year moratorium. VT doesn't need any new energy generation, until at least 2031, and needs only energy efficiency and conservation measures until then. Let's do renewables RIGHT !

~ Kathleen Iselin

Date: Thursday, December 13, 2012, 10:03 AM

ISO - New England says demand for electricity is down and will be flat in the next decade. So why are we permitting and subsidizing inefficient, environmentally destructive, bird and bat killing, property and quality of life destroying, divisive, industrial wind factories THAT WE DON'T NEED, and that do nothing to lower emissions.

Rob Pforzheimer
Sutton, VT

Efficiency said to cut power use, costs

By STEPHEN SINGER

<http://www.rutlandherald.com/article/20121213/NEWS03/712139871>

The Associated Press | December 13, 2012

HARTFORD, Conn. — Improved energy efficiency will help keep electricity use flat in New England in the next decade, allowing customers to save on utility bills and power companies to scrap costly transmission upgrades, the grid operator said Wednesday.

The region's six states spent \$1.2 billion from 2008 to 2011 to boost energy efficiency, ISO-New England told reporters in a briefing. Spending on energy efficiency is expected to increase to \$5.7 billion from 2015 to 2021.

The Holyoke, Mass.-based grid operator said energy efficiency has more than doubled since 2008 in an annual auction to win commitments from generators and others for power available three years from now. The result is that electricity use previously projected to rise by 0.9 percent annually between 2012 and 2021 will instead be flat.

The increased efficiency also will help utilities save money by skipping transmission upgrades. ISO-New England said the region can defer 10 transmission upgrades that earlier studies showed were needed to ensure reliability. Deferring the upgrades will save an estimated \$260 million, it said.

In 2010, New England's six states sponsored more than 125 energy efficiency programs offering financial incentives to promote efficient electrical devices, ISO-New England said.

Stephen J. Rourke, vice president for system planning at ISO, said replacing incandescent lighting with compact fluorescent bulbs is the "easiest and least expensive" way to cut energy use. Savings are multiplied as apartments, office buildings, factories, schools, hospitals and other large energy users install efficient heating and air conditioning, he said.

Seth Kaplan, vice president for policy and climate advocacy at the Conservation Law Foundation, a regional environmental group, said the report shows that efforts to conserve energy work. He said the group welcomes the ISO-New England report.

"This is a very big deal," he said. "The system needs to know what the demand is."

Nationally, demand for electricity is leveling off as residential power use falls, experts say, reversing a long upward trend. More efficient lighting and electric devices are partly credited for the change. New homes also are being built to use less electricity, and government subsidies for home energy savings programs help older homes use less power. Rourke said the weak economy also has contributed to reduced electricity use.

New England used about 130,000 gigawatt-hours of electricity last year. One gigawatt-hour can serve about 1 million homes for one hour.

From: Rob Pforzheimer [redacted]

Sent: Tuesday, January 08, 2013 11:22 AM

Subject: noise emissions from the wind turbines are causing the area residents adverse effect.

Documents <http://www.windaction.org/documents/36976>

Ontario Proposed Abatement Plan for turbine noise buried despite home abandonments

November, 2012 by G. W. Tomlinson District Supervisor, Ontario Ministry of the Environment

Summary:

The Melancthon I and Melancthon II wind energy facilities (200 megawatts), known as Melancthon EcoPower Center, began commercial operation in March 2006. Since that time, numerous complaints of turbine noise and other adverse effects were reported. Homes were abandoned. The Ontario government took almost 1½ years to respond to a freedom of information act to finally release this document, a draft abatement plan to address the noise. The document was never released to the public and plan never implemented. This document exposes that the Ontario Provincial government was well aware of the adverse effects created by the turbines years ago but chose to let people suffer.

PROPOSED ABATEMENT PLAN

1.0 ISSUE

1.1 Noise Emissions from Canadian Hydro Developers, (CHD), Dufferin County wind turbine operations, (Melancthon I and Melancthon II now collectively known as Melancthon EcoPower Center), are producing large numbers of complaints, (dating back to March, 2006), alleging adverse effects, (i.e. harm or material discomfort, allegations of adverse effect on health, rendering property unfit for human use, loss of enjoyment of normal use of property, and, interference with the normal conduct of business), due to the noise emissions from the 133 wind turbines, and the associated step-up transformer station.

1.2 Reports generated by the owner, as well as MOE noise measurements are unable to demonstrate non-compliance with the CofA (Air) noise limits, (NPC-232 and NPC-232 via the "Interpretation Document for Wind Turbine Generators").

1.3 Area residents are continuing to complain of noise emissions causing adverse effects. At least two families have moved out of their homes due to noise impacts from the operation of the Melancthon EcoPower Center. MOE District Staff are aware of at least 6

cases where CHD has bought out resident's homes to address and silence their ongoing noise complaints.

1.4 Operationally with regard to noise, (due to its subjective nature), MOE has taken the position that for a contravention of S.14(1) EPA to be demonstrated that there also be a demonstrated exceedance of the applicable NPC guideline, (and conversely that no exceedance of the applicable standard indicates no S .154(1) EPA contravention).

1.5 MOE Provincial Officers have attended at several of the complainant's residences and have confirmed that despite the noise emissions apparently complying with the applicable standard\CofA(AIR) limits, that the noise emissions are in fact causing material discomfort to the residents in and around their homes.

1.6 GDO Provincial Officers have measured wind turbine noise levels at complainant's homes that appear to indicate non-compliance with the CofA(Air).

1.7 Environmental Assessment and Approvals Branch, (EAAB), Staff have stated to District Staff that any field measurements of noise emissions from wind turbines will be inconclusive at best as there is currently no practical, reliable and defensible methodology to measure noise emissions from wind turbines. As such there is no way to measure compliance, (or lack thereof), with guideline\CofA limits in the field.

1.8 An approved and defensible procedure exists to measure noise emissions from transformer stations. Measurements of the noise emissions from the Melancthon EcoPower Center step-up transformer station by both CHD's consultant and MOE Provincial Officers indicate compliance with the NPC 232\CofA(Air) limits.

1.9 District Staff have recently met with Amaranth Township Council regarding this matter. Amaranth Council strongly expressed its concern as to the ongoing complaints and the apparent inability of MOE to address the various complaints\complainants except to state that the noise emissions from the facility are in compliance with the applicable limits. Staff from the other municipality that the Melancthon EcoPower Center is also located in (Melancthon Township), have indicated that its municipal council is also deeply concerned with MOE's apparently inability to address the various complaints.

2.0 CHALLENGES

2.1 Valid complaints continue to be received by MOE. MOE district Provincial Officers have verified that the complaints of adverse effect by area residents are for the most part justified.

2.2 MOE District Provincial Officers are unable to confirm compliance (or more to the point demonstrate non-compliance), with the CofA(Air) limits for the wind turbines as there is no practical, reliable and defensible methodology to measure noise emissions from wind turbines. In the opinion of District Staff, noise emissions from the wind turbines are causing the area residents adverse effect.

2.3 MOE District Provincial Officers are able to demonstrate compliance with the CofA(Air) limits for the step-up transformer, however, in the opinion of District Provincial Officers the noise emissions from the step-up transformer are causing area residents adverse effect.

2.4 The conventional approach to addressing noise complaints by requiring compliance with the applicable NPC guideline limits will not address this set of complaints. This would also appear to be the case for a number of other wind turbine facility complaints across the province.

From: Rob Pforzheimer

Sent: Thursday, January 10, 2013 1:19 AM

Subject: 'Wind Farms Driving Birds, Bats to Extinction'

"most of the species they claim are threatened by 'climate change' have already survived 10 to 20 ice ages, and sea-level rises far more dramatic than any we have experienced in recent millennia or expect in the next few centuries. Climate change won't drive those species to extinction; well-meaning environmentalists might."

UK Ecologist: 'Wind Farms Driving Birds, Bats to Extinction'



by Chris Clarke <http://www.kcet.org/news/rewire/wind/uk-ecologist-wind-farms-driving-birds-bats-to-extinction.html>

on January 9, 2013 6:39 PM

This Scottish bat is threatened by wind energy development, says an Oxford biologist. | Photo: Lee Carson/Flickr/Creative Commons License

This hasn't been a great month so far for wind turbine fans in the United Kingdom. First, a report released just before New Years found that many wind turbines' effective lifespans are much shorter than expected. And this week, a respected British ecologist is slamming the wind industry, saying that wind power is "devastating populations of rare birds and bats across the world, driving some to the point of extinction."

In an essay that's getting some serious traction in environmentalist circles, Clive Hambler -- a lecturer at Oxford, and author of the Cambridge University Press text "Conservation" -- slams the wind industry in no uncertain terms, saying that the sector's support from environmentalists comes as a result of environmentalists being essentially ignorant of science:

The environmentalists who support such projects do so for ideological reasons. What few of them have in their heads, though, is the consolation of science.

Hambler cites some distressing statistics from sources around the world. Between 6-18 million birds and bats are killed by Spanish wind farms each year Hambler says, including 400 griffon vultures per year just at Navarro. German wind turbines kill at least 200,000 bats per year, depressing populations up to 2,000 miles away. Wind turbines in the U.S. have been estimated to kill 70 bats per installed megawatt per year, on average, says Hambler. That would work out to about 320,000 bats per year in California.

Hambler's assessment of the reasons for wind power's popularity among environmentalists is rather unsparing:

Why is the public not more aware of this carnage? First, because the wind industry (with the shameful complicity of some ornithological organisations) has gone to great trouble to cover it up -- to the extent of burying the corpses of victims. Second, because the ongoing obsession with climate change means that many environmentalists are turning a blind eye to the ecological costs of renewable energy. What they clearly don't appreciate -- for they know next to nothing about biology -- is that most of the species they claim are threatened by 'climate change' have already survived 10 to 20 ice ages, and sea-level rises far more dramatic than any we have experienced in recent millennia or expect in the next few centuries. Climate change won't drive those species to extinction; well-meaning environmentalists might.

Hambler's essay appeared in the British paper *The Spectator* in a week in which the wind industry was still reeling from a study conducted for the UK's Renewable Energy Foundation that suggests wind turbines in the UK and Denmark have a much shorter productive lifespan than expected. According to the study, which was conducted by researchers at Edinburgh University, many turbines have declined to around 70 percent of their rated output by the time they reach 10 years of service.

Though that study was characterized as misleading by wind energy advocates, it too has gotten some traction, and its defenders are citing California as a cautionary example -- though not without engaging in hyperbole. Murdo Fraser, a Conservative Member of the Parliament of Scotland, described California's desert as a sort of elephants' graveyard of wind turbines in a statement to the Scots newspaper *the Courier*:

"We already know that the average wind turbine must be in operation for a minimum of two years to pay back the carbon cost of construction," he said. "If the average lifespan of a wind turbine is only 10 years then the Scottish Government must seriously question wind energy's role in displacing carbon emissions. "However, the rapid wear and tear of wind turbines comes as no surprise. We need only cast our eye across the Atlantic to see 12,000 turbines rotting in the Californian desert.

California does have quite a few obsolete wind turbines, and not just in the desert, but their total is probably closer to 3,000 or 4,000.

ReWire is dedicated to covering renewable energy in California. Keep in touch by liking us on Facebook, and help shape our editorial direction by taking this quick survey [here](#).

From: Alice Soininen

Sent: Wednesday, January 09, 2013 5:02 PM

Subject: Site Visit Request

I strongly believe that the US MUST develop energy that will not further destroy our environment and contribute to climate change. To not explore environment-friendly renewable energy is the ostrich approach and is reckless and self-serving. I would like to sign up for a site visit. My order of preference is:

Kingdom Community Wind, Lowell;

Sheffield Wind (have already been up there - it is gorgeous and much has been done to protect the wildlife of the NEK. Would like to see again especially if part of the trip up to Lowell);

South Burlington Solar Farm.

Alice H. Soininen

Thank you for the work you are doing!

From: Rob Pforzheimer
Sent: Thursday, January 10, 2013 12:41 PM
Subject: "Very clearly, wind turbines kill eagles,"

<http://www.brantfordexpositor.ca/2013/01/09/mpp-wants-answers-on-eagle-eviction>



MPP wants answers on eagle eviction 4
By Monte Sonnenberg, Simcoe Reformer
Wednesday, January 9, 2013 11:19:47 EST PM

SIMCOE - Haldimand-Norfolk MPP Toby Barrett is looking for answers in the aftermath of this week's outcry over the destruction of an eagle's nest in west Haldimand on the weekend.

The legislature in Toronto remains in recess while provincial Liberals pick a successor to outgoing Premier Dalton McGuinty. However, that hasn't stopped Queen's Park from buzzing about what some are calling an environmental travesty.

Barrett reported that the incident near Fisherville came up for discussion during a packed meeting Wednesday of the Progressive Conservative caucus. Barrett said no one was sympathetic to the Ministry of Natural Resource's argument that the nest was destroyed to reduce the risk of bird mortality from a pending wind turbine project.

"Why would they make a decision like that?" Barrett said. "I want to know who made this call. I want to find out if someone directed MNR to grant this permit and go against its legislation. My gut feeling is there is something seriously wrong here. I want to find out whether this decision was made outside the MNR."

The Summerhaven wind project belongs to Nextera Energy Canada. The MNR quietly issued the company a permit to remove the eagles' nest Dec. 31 because it was in an area slated for three turbines. The MNR didn't post word of the permit on its website until after 5 p.m. Friday. The crew that took down the tree in question began work Saturday morning before sunrise.

Hundreds have spoken out against the decision while the story has made headlines across the province and beyond. Barrett finds it interesting that the MNR upgraded the status of bald eagles from a species-at-risk to a species of special concern several weeks ago. The upgrade, Barrett says, conveniently coincides with the pending arrival of more than 180 turbines in Haldimand County.

Barrett added that the nest's removal represents a stunning admission that industrial wind turbines are hazardous to wildlife.

"Very clearly, wind turbines kill eagles," Barrett said. "Why else would they remove the nest?"

Also on Wednesday, Haldimand Mayor Ken Hewitt said he was "shocked" when told of the eagles' eviction. Saturday's incident, he said, reinforces the worst fears many have about the Green Energy Act and its impact on municipal land-planning authority. Under the act, decisions on renewable energy projects are removed from municipal jurisdiction.

"If there's a flaw in the act, it's that community involvement doesn't happen," Hewitt said. "This is typical of the act in its entirety. It just solidifies people's view that things are being done without their input."

The Fisherville area is on the eastern edge of the Long Point Region Conservation Authority watershed. Langton Coun. Roger Geysens, chair of the authority, expressed surprise this week that some believe the LPCRA was in on the decision. This, he said Tuesday, is untrue. "This is not a good thing to do," Geysens said. "I'd like to hear why the MNR allowed this to happen."

Many in Norfolk are surprised that the MNR granted the permit when DeCarolis Farms Ltd. of Simcoe was fined \$10,000 more than 10 years ago for chopping down trees near an eagle's nest north of Fisher's Glen. The MNR laid charges after an eaglet was found dead in the nest. There have been frequent suggestions in recent days of a double standard.

"I think DeCarolis should ask for his money back," says Dr. Scott Petrie, executive director of Long Point Waterfowl. "If the province is giving permission for the removal of these nests, what message does that send to other landowners?" Nearly 60 bald eagle breeding pairs have been identified in southern Ontario. A new couple built the nest near Fisherville last fall and were expected to lay eggs in it this spring.

Monte Sonnenberg



From: Rob Pforzheimer [redacted]
Sent: Thursday, January 10, 2013 1:28 PM
Subject: board has failed to protect the health of the town's residents

"Scituate leaders have estimated the turbine, built next to the town's wastewater treatment plant, will save the town about \$250,000 in annual energy costs for the next 15 years."

Hope it's enough money to cover the lawsuits.

Couple ask court to turn off Scituate wind turbine

ScitWindTurbine 002.JPG

PATRICK RONAN/THE PATRIOT LEDGER

Scituate's 390-foot wind turbine towers over Mark and Lauren McKeever's home off the Driftway. The homeowners are among roughly 30 residents who say noise and shadow flicker from the turbine has negatively affected their health. The McKeevers have filed a lawsuit against the board of health.

By Patrick Ronan

The Patriot Ledger

Posted Jan 04, 2013 @ 04:10 AM

Last update Jan 10, 2013 @ 08:07 AM

VIDEO: Complaints aired at November meeting

Poll

Should people who live near wind turbines receive property tax abatements?

Thank you for your vote.

· Yes 59%

· No 40%

· Total votes: 603

SCITUATE —

A Scituate family has turned to the courts in an effort to shut down the town's wind turbine.

Mark and Lauren McKeever say they and their two children have suffered from sleep deprivation, nausea, anxiety and other ailments since the wind turbine started spinning last March.

The 390-foot-tall turbine is located about 600 feet from their home off the Driftway.

Last month, the McKeevers filed a lawsuit in Plymouth Superior Court against the board of health and its three members, Russell Clark, Francis Lynch and Michael Vazza. The McKeevers have asked that a judge reverse the board's decision, made in November, to keep the turbine operating while they plan a new study.

The McKeevers allege that the board has failed to protect the health of the town's residents, and it made a decision based on unreliable information provided by the turbine's owner.

"The Board of Health failed to act in accord with its statutory authority and jurisdiction and instead acted in a manner that was arbitrary, capricious, and an abuse of the Board of Health's discretion," reads the lawsuit, filed on Dec. 14.

The McKeevers are among dozens of residents in Scituate's Third Cliff neighborhood who, in recent months, have complained of health effects, including headaches and dizziness, from the turbine's noise and flicker.

Aside from shutting down the turbine, the McKeevers are also seeking money to pay for "damages, costs and attorneys' fees in an amount to be determined," the lawsuit states.

The board of health has 30 days to respond to the McKeevers' complaint, filed by their attorney, Tanya Trevisan. James Toomey, legal counsel for Scituate, could not be reached for comment Thursday.

During the health board's Nov. 14 meeting, Mark and Lauren McKeever spoke emotionally about their troubles since the turbine went up.

"Everything about it is wrong," Mark McKeever said at the meeting. "And I don't know what's going to come out of this, but I am a prisoner, and I'm tied to this house. I can't go anywhere."

The McKeevers couldn't be reached on Thursday to comment about their court filing.

Russell Clark, chairman of the board of health, said although he feels badly for the McKeevers, he doesn't believe the turbine should be turned off unless there is conclusive evidence that it violates noise or flicker laws. State law says a turbine can't emit noise that's more than 10 decibels louder than ambient noise.

At the Nov. 14 meeting, the board voted to form a steering committee that will set the terms for a new noise study. The committee, consisting of town health officials, turbine owners and Third Cliff residents, was set to meet Friday afternoon.

“We’re all residents of Scituate, but you’ve got to look at it in a judicial way, too,” Clark said. “So it’s a matter of gathering information from all sides, and that’s why we’re doing testing.”

The 1.5-megawatt turbine is owned by Scituate Wind, a joint venture of Solaya Energy and Palmer Capital Corp. Clark said the owner has agreed to pay for a new noise study, but it won’t pay for a flicker study because the company said it adequately tested flicker projections before the turbine went up.

Scituate leaders have estimated the turbine, built next to the town’s wastewater treatment plant, will save the town about \$250,000 in annual energy costs for the next 15 years.

Patrick Ronan may be reached at pronan@ledger.com.

READ MORE about this issue.

Read more: <http://www.patriotledger.com/features/x2105864870/Scituate-couple-files-suit-over-wind-turbine#ixzz2Hb7YmUc5>

From: Leslie Morey [REDACTED]

Sent: Wednesday, January 09, 2013 12:42 PM

Subject: To the Siting Commission Question regarding public comment

To The Siting Commission:

I would like to request that all the comments from the public or industry or municipalities etc. you receive from input either sent through the website or email addresses, or by mail or other means, such as fax, be posted to your website for public viewing, as necessary information which must also be available to anyone requesting it, as this is a public and not secret process. It is my understanding, in a public process such as this, this is a legal requirement, as input from the public has been requested by a government appointed commission and that material will be considered by the Siting Commission in any recommendations made or decisions that are rendered. At present, this public input information is not available on your website or by any other means.

So you are not confused, please do not direct me to the website for the information about each meeting, I have found the materials which are posted to the website regarding the agenda, speakers, all presentations and a transcript of past meetings, I am not asking for that information.

Thank you, I look forward to viewing the complete public input information sent to the commission in this process.

Best regards,

Leslie M. Morey