Our project will follow the guidelines put in place by the Ministry of the Environment regarding sound levels and minimum distances for wind projects in Ontario: specifically, a project must be sited at least 550 metres from non-participating receptors provided a cumulative sound level does not exceed 40 dBA. The 40 dBA value is the same as the night noise guideline established by the World Health Organization Europe (2009) to "protect the public, including the most vulnerable groups such as children, the chronically ill and the elderly".

6. How do you take into consideration that a child's automomic nervous system is 10-15dB more sensitive then an adults. When deciding the set back of a turbine to residential homes and properties?

When developing their night noise guidelines for Europe, the World Health Organization looked at the response of children to noise (WHO 2009, Appendix 4. Noise and Sleep in Children). One study that WHO reviewed (Mills, 1975) suggested that children aged 5–7 years of age were actually 10–15 dB less sensitive to pure tones than adults aged 22–30. WHO cited another study (Busby, Mercier and Pivik, 1994) about children, sleep, and noise and stated "Another report on male hyperactive and normal children aged 8–12 showed that these children were awakened with auditory stimulus intensity levels of up to 123 dB SPL, much higher than values reported for adults (range of 50–85 dB)". Following their review, WHO suggested a night noise guideline of 40dB to "protect the public, including the most vulnerable groups such as children, the chronically ill and the elderly".

7. If your company cares so much for the residents of the these rural communities then what is NextEra doing to insure that not only are the dBA noise levels below the requirements but also the dBC?

It would be a noble thing for NextEra to step up to the pate and go above the requirements and make sure everyone involved and affects by the wind turbines are safe and comfortable in their own home.

Environmental Noise Assessments typically report sound levels on the dBA scale which represents the relative response of the human ear. The current guidance from the MOE and the requirements for REA approval require only the reporting of dBA noise levels. dBC noise levels are typically not used to assess broadband annoyance as the dBC weighting curve does not represent the relative response of the human ear. The reporting of dBC levels is usually reserved for problems involving very high sound levels, impulse sounds or significant low frequency noise (below 200Hz). Very high noise levels and impulse noise are not applicable to wind turbines. The difference between dBC and dBA levels can be used as an indication of the significance of low frequency sound energy (Leventhall, 2003). However, we are not aware of any evidence, reports or studies which have proven that wind turbines, when sited beyond 550m from points of reception, produce significant low frequency noise which would justify reporting the dBC-dBA difference. We are aware of at least one study which investigated low frequency emissions from wind turbines in detail and concluded that "In accordance with the above findings, and in conjunction with our extensive literature search of scientific papers and reports, there should be no adverse public health effects from infrasound or low frequency noise at distances greater than 305 meters (1000 feet) from the wind turbine types measured: GE 1.5sle and Siemens 2.3-93." (O'Neal et al, 2011). NextEra sponsored this study as part of our commitment to ongoing research into turbine technology and environmental impacts.

Ref:

O'Neal R.D., Hellweg Jr R.D., Lampeter R.M. "Low frequency noise and infrasound from wind turbines." Noise Control Eng. J. 2011, v59:pp135-157.

Leventhall G., "A Review of Published Research on Low Frequency Noise and its Effects", Report for Department for Environment, Food, and Rural Affairs, DEFRA, 2003.

8. What affect does the shadow flicker have on a person diagnose with vertigo or epilepsy, who lives in close proximity of your turbines?

Harding et al. (2008) and Smedley et al. (2010) investigated the relationship between photoinduced seizures (i.e., photosensitive epilepsy) and wind turbine blade flicker (also known as
shadow flicker). Both studies suggested that flicker from turbines that interrupt or reflect sunlight
at frequencies greater than 3 Hz pose a potential risk of inducing photosensitive seizures in 1.7
people per 100,000 of the photosensitive population. For turbines with three blades, this
translates to a maximum speed of rotation of 60 rpm. The normal practice for large wind farms is
for spin rotation speeds well below this threshold: in fact, the turbines selected for this project (1.6
MW GE) have a maximum rotational speed of 21.

9. Has anyone ever reported sleep loss from living near a wind farm to your NextEra hotline number in either Canada or the United States?

Yes, we have received complaints. However there has been no established direct relationship between wind turbines and adverse health effects. NextEra Energy Resources has an excellent track record of responding to matters raised at our numerous generating facilities across the continent. In Ontario, we will be bound to a communications and dispute resolution protocol as a part of any approval by the Province for the Goshen Wind Energy Centre. In 2010, the Canadian Broadcasting Corporation (CBC) commissioned a telephone survey of Canadian adults and youth to investigate the health of Canadians (Leger Marketing, 2010). The survey revealed that 60% of adults and youth identified as being tired most of the time. There are many possible reasons for a change in sleep; in fact, the Mayo Clinic (2011) identifies change in sleep (among others) as common symptoms of stress.

10.What is one word that you would use to describe rural life?

We are unsure of the intent of this question, as the matter would tend to be of a subjective nature.

Derek Dudek | Community Relations Consultant NextEra Energy Canada, ULC 5500 North Service Road, Burlington, ON L7L 6W6 o:905.335.4904 x18 f:905.335.5731 mobile - 519.318.0237 derek.dudek@nexteraenergy.com

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From:

Sent: Tuesday, December 06, 2011 3:04 PM

To: SharedMailbox, GOSHEN-WIND

Subject: Questions

- 1. Do the turbines take electricity to operate?
- 2. Can you show me evidence of the efficiency of your turbines?
- 3. Without government subsides, are your turbines cost effective?
- 4. Does ice on the turbines blades affect the sound?
- 5. What studies/research has been completed to list the the affects the turbines might have on children, pregnant women and their unborn fetus, who live in close proximity to multiple turbines?
 Are these studies done on the turbines that are 1.5MW or larger or on the turbines that are smaller then 1.5MW
- 6. How do you take into consideration that a child's automomic nervous system is 10-15dB more senisitve then an adults. When deciding the set back of a turbine to residential homes and properties?
- 7. If your company cares so much for the residents of the these rural communities then what is NextEra doing to insure that not only are the dBA noise levels below the requirements but also the dBC? It would be a noble thing for NextEra to step up to the pate and go above the requirements and make sure everyone involved and affects by the wind turbines are safe and comfortable in their own home.
- 8. What affect does the shadow flicker have on a person diagnose with vertigo or epilepsy, who lives in close proximity of your turbines?
- 9. Has anyone ever reported sleep loss from living near a wind farm to your NextEra hotline number in either Canada or the United States?
- 10.What is one word that you would use to describe rural life?

Thanks you for your time and I look forward to hearing back from you.



From: Dudek, Derei

Tot

Boo: Gereau, Nicole; Hernandez, Joselen; "Julia Cushing@secom.com".

Subject: RE: site needs updating!!!!!!!!!!! Goshen/Bluevater projects

Date: Monday, December 12, 2011 11:15:00 AM

Hello

The website <u>www.nexteraenergycanada.com</u> was updated today and you should be able to review the maps and boards from the Varna under Proposed Projects - Goshen Project - Public Meeting #1 Municipality of Bluewater.

If you have any questions that were not answered at one of our events, or that you did not write down on one of our comment sheets, feel free to forward those questions to me, so that I can get you the answers.

With respect to the gas storage areas, I will follow up with our team to get you answers on this matter as well.

Thanks,

Derek Dudek | Community Relations Consultant

NextEra Energy Canada, ULC 5500 North Service Road, Burlington, ON L7L 6W6 o:905.335.4904 x18 f:905.335.5731

mobile - 519.318.0237

derek.dudek@nexteraenergy.com

From:

Sent: Friday, December 09, 2011 10:40 AM

To: SharedMailbox, GOSHEN-WIND

Subject: site needs updating!!!!!!!!! Goshen/Bluewater projects

Trying to load project description. File is damaged! Also, please advise site for maps of turbine locations for Goshen and Bluewater projects or send to this email address.

If this is on the website, then it is too hard to find! and indicates a lack of professionalism. Also your presentations in Zurich and Varna were not relevant to Bluewater/Goshen and your representatives were unable to answer questions. It appears that the information provided was generic in nature and had nothing to do with "our" area. Evidently studies have been done....but one would wonder how you missed the underground-natural gas storage projects underway and proposed for this area and your representative knew nothing about these projects. Certainly, have NOT done your homework and it is no wonder people are so upset! I have NO confidence in your ability to make sure that local residents are safe, nor do I feel you care.

Please provide links to the maps and also copies of studies done on vibration/etc. over pressurized natural gas storage areas as soon as possible.

From:
To: Dudek, Derek
Cc: Geneau, Nicole
Subject: awesome job

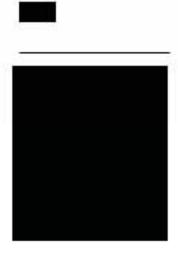
Date: Sunday, December 11, 2011 10:36:18 PM

Hi Nicole and Derek,

I wanted to let you know how impressed I am with NextEra's professionalism in dealing with the various complex issues that you have to address with your projects. It is such a great idea to bring in the various community groups to provide input - thanks again for including us as part of your process.

And let me just say that I was floored by the genorosity of the proposed Community Vibrancy Fund. I know that NextEra is not required to do something like this, so it really shows how serious you are about having a positive impact on the communities that you work in. I look forward to working together with you in the future to make sure your proposed Fund has the best possible impact for both the host communities and NextEra.

Hope to see you again soon,



Subject:

RE: NextEra Energy Canada - Information on the Bluewater and Goshen projects

From: Hernandez, Joselen [mailto:Joselen.Hernandez@nexteraenergy.com]

Sent: Wednesday, December 14, 2011 12:11 PM

To:

Subject: RE: NextEra Energy Canada - Information on the Bluewater and Goshen projects

Hi

I'm sorry you weren't able to get to the information you're seeking on our website. I've attached two maps for each of the Bluewater and Goshen projects. Each of these maps show the draft proposed turbine locations, one just shows it with the satellite imagery (as was displayed at the events) and one is simply easier to view since it does not have the satellite imagery. I've listed the files and their corresponding projects below. I've also included a link to the projects themselves on our website for additional information, as in the display boards and reports to date.

Please feel free to contact me if you have any additional questions.

Bluewater Wind Energy Centre:

Files: BLW_SiteLocationMap_noAerial_11x17.pdf

60155032BLW_SiteLocationMap01_11x17.pdf

Website link: http://www.nexteraenerevcanada.com/proiects/bluewater.shtml

Goshen Wind Energy Centre:

Files: GSH_SiteLocationMap_noAerial_11x17.pdf

60155032GSH_SiteLocationMap_11x17.pdf

Website link: http://www.nexteraenergycanada.com/projects/goshen.shtml

Kind regards, Josie

Josie Hernandez | Sr. Media Relations Specialist

NextEra Energy Resources 561-694-6225 Direct Line 561-315-3280 Mobile

ioselen hernandez@NextEraEnergy.com

From:

Sent: Wednesday, December 14, 2011 12:01 PM

To: Hernandez, Joselen

Subject: Re: NextEra Energy Canada - Information on the Bluewater and Goshen projects

Thank you for the response however it was not very helpful as I am looking for the actual sitings of the turbines which were on the display boards at the public consultation meetings and I was informed would also be online this week. Unfortunately, they wern't online prior to the presentation but I was informed they would be there last Monday. I must be missing something from your display boards as to what you are calling the turbines as I cannot find them in the attached information. Can you please assist?

Thank you.

From: "Hernandez, Joselen" <joselen.hernandez@nexteraenergy.com> To: Sent: Tuesday, December 13, 2011 9:49:09 AM Subject: NextEra Energy Canada - Information on the Bluewater and Goshen projects</joselen.hernandez@nexteraenergy.com>
Good morning and thank you for your inquiry. Yes, the information you're looking for (maps, display boards from last week's meetings) are available on the NextEra Energy Canada website. The website address is www.NextEraEnergyCanada.com . Once you're there, please click on Proposed Projects and then scroll down to the Goshen and Bluewater Projects for the information you're looking for. If you have any other questions, please feel free to contact me.
Regards, Josie
Josie Hernandez Sr. Media Relations Specialist NextEra Energy Resources 561-694-6225 Direct Line 561-315-3280 Mobile joselen.hernandez@NextEraEnergy.com
Below is the result of your feedback form. It was submitted by () on Monday, December 12, 2011 at 20:25:45
name:
emailAddress:
phoneAreaCode:
phoneNumber1:

comments: Last week I attended a public consultation for the Goshen and Bluewater wind turbine projects planned for the Zurich area in Southwestern Ontario, Canada. At that time, I was informed that the maps for where the turbines would be sited would be on line today (Monday)December 12, 2011. I cannot seem to locate them as your site is quite extensive. Could you please let me know where / how I can find them on your website.

Thanks

Submit1: Submit Form

phoneNumber2:

From: <u>Dudek, Derek</u> To:

Subject: RE: goshen - noise comparisons

Date: Tuesday, January 10, 2012 12:10:00 PM

Hello

The proposed turbine is on the property directly behind you. The road to it runs up along the property line between the two 100 acre parcels. It could be owned by the same person, and certainly the farm with the pig barn is also a participant in the project as we are showing underground cabling on that property as well.

Hope this helps.

From: Prome Sent: Friday, December 23, 2011 2:27 PM

To: Dudek, Derek

Subject: RE: goshen - noise comparisons

Hi Derek thanks for the noise info. I have another quesion, is proposed windmill #44 somewhat behind our house on the Goshen project on the pig farm property or the farmland behind us which extends to the pig farm? It seems to be on the borderline between the 2 properties? Possibly the same person owns both properties? Will you let me know who owns them, if you know and clarify which property it is on. Thanks, no rush, enjoy Christmas and let me know when you can.

From: Derek.Dudek@fpl.com To:

Date: Wed, 21 Dec 2011 14:06:47 -0500 Subject: goshen - noise comparisons

Hello

I just called your number but it was busy. I know when we last spoke you had requested some information on comparative sounds at 40dba. Our noise engineer forwarded me this following link: http://www.ene.gov.on.ca/environment/en/subject/wind_energy/STDPROD_089301.html

Hope this helps, and don't hesitate to contact me if there was other information you were calling about.

Derek Dudek | Community Relations Consultant NextEra Energy Canada, ULC 5500 North Service Road, Burlington, ON L7L 6W6 o:905.335.4904 x18 f:905.335.5731 mobile - 519.318.0237

1100110 313.310.0237

derek.dudek@nexteraenergv.com

January 04 2012

Mr. Derek Dudek
Community Relations Consultant
NextEra Energy Canada.ULC
5500 North Service Road, Suite 205
Burlington, ON
L7L 6W6

Dear Mr. Dudek , At the recent gathering at Grand Bend we were surprised and disappointed to learn that after all the coaxing and described financial benefits when we agreed to participate in a wind energy lease agreement there is not even one turbine planned for our property.

We should be pleased to be informed as to why our property was not considered suitable. We are serious about this request as we expect the sale value of our property has been sustaniually lessened - perhaps not for the acreage but quite likely of our restored !869 fieldstone house.

Yours truly,

Subject: RE: Goshen - FW: Phone Message

From: Dudek, Derek [mailto:Derek,Dudek@fol.com]
Sent: Wednesday, January 11, 2012 1:56 PM

To: Geneau, Nicole; Bird, Thomas; Vonbische, Thomas

Cc: Collis, Gina; Cushing, Julia

Subject: Goshen - FW: Phone Message

Hello all,

Just spoke with property and had similar concerns to those raised at the public meetings about the wet area to the s/w which is a major bird staging area. He also offered his thoughts that the road location would be better suited on the n/s of this property to avoid the wet area. I indicated the concerns have been forwarded to AECOM and the turbine location is not final. He seemed ok with that but I told him if there was any other information I would let him know.

PS - I'm not sure if he is one of our landowners, but he did note that he receives mail from us, and that his mailing address should be

Thanks,

Derek 519-318-0237 To: Cushing, Julia

Subject: RE: boundaries of NextEra Energy wind energy projects - Goshen and Bluewater

From:

Sent: Tuesday, January 24, 2012 2:13 PM

To: Dudek, Derek; Geneau, Nicole

Cc:

Subject: boundaries of NextEra Energy wind energy projects - Goshen and Bluewater

January 24, 2012

Hello Derek and Nicole:

With reference to earlier discussion and correspondence concerning boundaries of NextEra Energy's Goshen and Bluewater projects, I wish to provide the following information.

As forwarded to you by diagram attached to an email of November 16, 2011 and described in our meeting of December 6, 2011 at a Zurich meeting, the Chamber of Commerce requires the following. That no boundary of either of the above mentioned projects be closer to the Village of Zurich in any direction than a line running east and west one half the distance between Sararas Road and Pepper Road, a line running north and south one half the distance between the Bronson Line and Blackbush Line, a line running east and west one half the distance between Danceland Road and Kippen Road, and a line running north and south one half the distance between Babylon Line and Parr Line...all roads named are in the Municipality of Bluewater, Ontario.

At the December 6, 2011 meeting you advised that you would respond by mid January 2012 to our request for boundary changes to the Goshen and Bluewater projects.

At a recent meeting of the Zurich and District Chamber of Commerce if was decided, in the interest of arriving at an amiable solution to our concern and request, to offer a significant concession to your firm which is described below.

In the Bluewater Wind Project, and AECOM's December 2011 map of the Project there are described turbines known as "6" and "31". These two turbines appear to be beyond the boundary that we have requested and lie within the area that would be a buffer around Zurich and within the area where we have requested no wind project to exist. We would agree to an exemption of these two turbines (if the project proceeds)allowing them to be outside of the boundary with the proviso that they both be moved northerly on the current shown property owner's property from the proposed position shown on the AECOM's map. We recognize that the movement northerly on the same property, of turbine "31", may cause it to be within the new proposed Project boundary.

In the Goshen Wind Project, and AECOM's December 2011 map of the Project there are described turbines known as "2", "3", "4", "7" and "10". These five turbines appear to be beyond the boundary that we have requested and lie within the area that would be a buffer around Zurich and within the area where we have requested no wind project to exist. We would agree to an exemption of these five turbines (if the project proceeds) allowing them to be outside of the boundary with the proviso that they all be moved southerly on the current shown property owner's property from the proposed position shown on the AECOM's map. It would appear that a move south of the turbines "7", "10" and "4" can place them within the new proposed Project boundary. Turbine"2" should move to the southerly side of the current property from its current position on the northerly side of the property. Turbine "3" can also move southerly on the current property.

We believe that NextEra Energy should be very receptive to this proposal as it meets all of your proposed requirements. It is important to the Zurich and District Chamber of Commerce that we receive your favourable approval of this proposal at an early date, and we would suggest before the end of January 2012. Assuming that your will accept this proposal we would clarify all with a formal written understanding and agreement.

Finally, we wish to emphasize that by proposing this agreement concerning boundaries, that this is not an endorsement of either Project.

Sincerely

Subject:

RE: Your question on bats from Bluewater/Goshen Open Houses

From: Christy Humphrey [mailto:chumphrey@nrsi.on.ca]

Sent: Wednesday, January 25, 2012 4:33 PM

To:

Subject: Your question on bats from Bluewater/Goshen Open Houses



It was nice speaking to you at the Bluewater and Goshen open houses in early December. I apologize it has taken me so long to get back to you on this, but I'm just following up on the discussion you and I had about bats and what they eat (namely, I mentioned that what I understood was that our bats don't eat a lot of mosquitoes due to the poor nutritional value). I've done a bit of digging on what bats eat, and have found some information from a book on general bat ecology that Brock Fenton (University of Western Ontario) authored. This is from Chapter 5 of his book:

"The majority of species of bats feed mainly on insects. As a rule, bigger bats eat larger insects than smaller bats, but the actual choice of prey appears to depend upon its local abundance. This means that anywhere on any night what a Little Brown Bat, Hoary Bat, Greater Horseshoe Bat, or Noctule eats will depend upon the insects it encounters as it flies about hunting. For the Little Brown Bat [this is one of the most common species we have in Ontario], caddis flies, mayflies and midges may be staple items over the summer. Their actual proportions in the diet will change from night to night. For a Greater Horseshoe Bat [note this species is not found in Ontario], beetles known as cockchafers or June bugs are readily taken when they are abundant.

"Insectivorous bats may hunt in concentrations of insects. For example, in southern British Columbia, Canada, Big Brown Bats [another very common Ontario species] hunt over the Okanagan River and for most of the summer caddis flies are the bulk of their diet. The caddis flies emerge by the tens of thousands from the river, feeding several other species of bats, as well as Common Nighthawks, insectivorous birds that hunt at twilight. Throughout the tropics many insectivorous bats regularly congregate to feed in swarms of flying termites. They usually are joined by other predators such as sun spiders, birds and mongooses.

"In southern Ontario, Canada, Red Bats and Hoary Bats harvest insects that fly in clouds around spotlights. At some locations they take mainly moths, adjusting their selection according to the abundance of different species of moths. On some nights in July, Red Bats and Hoary Bats both feed mainly on forest and eastern tent caterpillar moths which emerge by the thousands. On other nights the Red Bats take smaller moths, and the Hoary Bats larger ones, reflecting the sizes of the two bats (12-15g and 25-30g, respectively). In some parts of Germany, Noctules [not an Ontario species] forage on house crickets that emerge in large numbers from garbage dumps.

"It is safe to say that around the world bats feed on almost any of the insects they might encounter at night. Although it is easy to find reports of a species of bat feeding only on one species of insect over a short period of time, this observation is not evidence that bats specialize on particular species of insect. Seasonal changes in the species of insects that are available makes it unlikely that bats can afford to specialize on any particular insect species over the long term. Furthermore, the insects available to the bats typically change over the course of a night. In southern Manitoba, Canada, for example, Hoary Bats take mainly beetles and moths in the first part of the night, but at dawn go out and hunt dragon flies.

"Since some insectivorous bats occasionally emerge and forage during the day, their diet may also include diurnal insects such as butterflies and bees. Bats, such as the Mouse-eared Bat of Europe, that hunt only insects that walk along the ground, often prey on ground beetles.

"Bats eat a lot of insects, as measured by numbers of individuals consumed or numbers of species. One indication of the affect bats have on insects is that many kinds of insects have ears for alerting them to echolocation calls which herald an approaching bat. As we shall see in Chapter 12, bat conservationists often argue that insectivorous bats are beneficial because of the vast quantities of insects they consume. If a lactating Little Brown Bat were to feed just on mosquitoes, she would eat more than 5,000 of them every night. In southeastern Ontario in August, Little Brown Bats regularly eat mosquitoes, but it remains to be seen if any of them feasts mainly on mosquitoes."

from Bats (revised edition). By M. Brock Fenton. Chapter 5 (What Bats Eat). Page 65 - 67. Unfortunately there were no references in his book to papers discussing what the bats in Ontario eat (only to fruit, nectar, and frog-eating bats from other parts of the world).

In addition, I have found some information from the bat monitoring course I attended in June of 2010 (run out of Brock Fenton's Lab, put on by the Ministry of Natural Resources. I was mistaken when I said that it was Brock Fenton who said bats don't largely eat mosquitoes - it was Robert Barclay who was leading the discussion on bat ecology, and he is out of the University of Calgary).

The information provided in the course was that the insects that bats feed on appear to be chosen based on availability of the prey (ie, bats are 'opportunistic'). The course also referenced the following research paper:

Clare et al. (2009) used a molecular approach to identify prey of eastern red bats (one of our migratory bats). They identified 127 species, and none of those species identified were mosquitoes.

Reference:

Clare, E.L., Fraser, E.E., Braid, H.E., Fenton, M.B., and Hebert, P.D. 2009. Species on the menu of a generalist predator, the eastern red bat (*Lasiurus borealis*): using a molecular approach to detect arthropod prey. Molecular Ecology 18 (11): 2532 - 2542.

When looking up the above paper, I also came across another paper by Clare and team which came out in April of 2011. They also used molecular methods to identify prey eaten by little brown bats. Again, none of the species identified were mosquitoes. This study collected guano from May 6 - August 19, 2008 at known maternity roosts from three sites: an agricultural site near Clinton, an agricultural site in Norfolk County, and a forest site in a conservation area in Richmond Hill.

Reference:

Clare, E.L., Barber, B.R., Sweeney, B.W., Hebert, P.D.N., and Fenton, M.B. 2011. Eating local: influences of habitat on the diet of little brown bats (Myotis lucifugus). Molecular Ecology 20 (8):1772 - 1780.

So to sum up it appears that bats are readily opportunistic, and will take advantage of the availability of insects when they emerge, particularly if this is en masse. I don't doubt that this may include mosquitoes, if they were to emerge en masse as well. However it is very interesting to note the results of the study on little brown bats that was published this year, where no mosquitoes were identified in the samples collected over a summer (noting that the samples analyzed were a sub-set of the total guano collected, due to the large volume produced by what was estimated to be thousands of bats). I would say it is likely that some mosquitoes were eaten, but this would represent only a very small proportion of their total diet.

Nonetheless it is evident that bats are important controls on our insect populations, and the studies we've conducted at the Bhuewater and Goshen projects have followed the guidelines established by the bat experts in the MNR in order to identify and protect significant bat habitats in the area so that they can continue to perform insect control for us!

I hope this helps provide some more detail on the diets of bats, and please let me know if you have any other questions pertaining to bats that I might be able to answer.

Cheers,

Christy

__



(p) 519.725.2227

(f) 519.725.2575

(e) chumphrey@nrsi.on.ca

www.nrsi.on.ca

From:
To: Dudok, Dorsk
Cc:

Subject: Re: Goshen - Inquiry

Date: Wednesday, March 07, 2012 12:03:53 PM

Good morning

I am responding to your response to my e-mail. The vertigo I experience is caused by looking at a moving turbine. Vertigo exists because of the turbines. You may call it a pre-existing condition. If there were no turbines along the road where I drive then I would not get dizzy during the drive. Therefore, Nextera knows that I do get dizzy because of the turbines. Now that you and I know that moving turbines make me dizzy there will be a problem when the turbines are built around my house. I can not be a prisioner in my own home by not looking outside or by not going outside. Where should I move to where there will be no turbines?

---- Original Message -----

From: Dudek, Derek

Sent: Tuesday, February 28, 2012 4:17 PM

Subject: Goshen - inquiry

Hello

We appreciate your comments and concerns about the effect you think wind turbines may have on your existing health conditions. With respect to your concern regarding vertigo, we are unaware of any credible scientific or medical research that has been conducted on the issue of wind turbines and their potential to affect people with pre-existing vertigo. We take some comfort in the fact that there are thousands of turbines across Europe, Australia and the United States and this issue does not appear to have surfaced around these existing facilities, some of which have been in operation for decades. In terms of your sensitivity to excessive electricity, we would encourage you to read the following information on Electric and Magnetic Fields (EMFs) and Extremely Low Frequencies (ELFs) from Health Canada that is attached to this email. This information relates directly to concerns over transmission lines such as those being built as part of our wind energy centres. Very briefly, Health Canada states that "When you are indoors at home, the magnetic fields from high voltage power lines and transformer boxes are weaker than those from household electrical appliances".

With respect to impacts on bird migration, the regulatory approvals process for wind energy projects outlined by the Province takes these matters into consideration. It requires extensive research and monitoring both before a project is approved, and after it has begun operations to determine what if any impacts might require changes or mitigation measures to reduce the impacts on bird migration. This research is part of an overall Natural Heritage Study that requires approval by the Ministry of Natural Resources, before a wind energy project can obtain a permit to construct and operate. Indeed, our draft project layout takes into account this information and has resulted in avoidance of specific areas, particularly within the Goshen project area.

Please do not hesitate to contact me if you have any other questions regarding the project.

Thank you,

Derek Dudek | Community Relations Consultant NextEra Energy Canada, ULC

5500 North Service Road, Burlington, ON L7L 6W6

o:905.335.4904 x18 f:905.335.5731

mobile - 519.318.0237

derek dudek@nexteraenergy.com

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From

Sent: Tuesday, February 21, 2012 5:38 PM

To: SharedMailbox, GOSHEN-WIND; lisa.thompson@pc.ola.org

Subject: wind farm Goshen and Bluewater

Dear Nextera;

It really makes me wonder why a company like Nextera would continue to go ahead with the proposed industrial wind project when there is so much local opposition. Why is Nextera still proceeding with the Bluewater and the Goshen Project?

If the project does go through what is Nextera prepared to do for me as I suffer from vertigo and am sensitive to excessive electricity.

Another concern is the migration pattern of many bird species. Is it not our international responsibility to protect the wild life that uses this area for migration?

I look forward to hearing from you.

From: Sent: Wednesday, February 29, 2012 10:11 AM

To: Dart, Andrea

Subject: goshen project and tundra swans

Attachments: TUSW Satellite tracking paper.pdf; Petrie et al. 2002 - TUSW Habitat Use at Long Point

(1).pdf

Good morning Ms. Dart,

We've got an unusual year for observing the tundra swans. The first tndra swans (about 15) that I observed in the Goshen project this year was on Friday, February 2, 2012 at the intersection of Hwy.81 and Kirkton Road. They were flying at low altitude heading east into the goshen project. There were about 500 swans observed deep in Thedford Bog (this is the 600 acre staging area near Grand Bend that can attract 20,000 tundra swans each year) at that time also. As I was walking yesterday, Tuesday, February 28, 2012 (my address is 70419 Goshen Line and you can find my residence on your arial photograhs) and I saw 2 small goups that appeared to land in a small popular staging area (about 1 km north of my residence) in a nearby agricultural field. Needless to say this is a rare year for early arrivals of our magnificent migrating swans. The Lambton Heritage Museum's annual Return of the Swan's Festival is set for March 10 - April 01, which is more characteristic of the time of their arrival.

I have attached a Tundra Swan satellite tracking data paper and another on habitat use at Long Point, that I want your solemn promise you will read and take seriously. Other countries do 3 years of pre-construction monitoring surveys as should you. I have a scientist friend (coauthor of the attached papers) that would like to do a review of your study design and your analysis and conclusions.

Do not misunderstand me, I am simply a voice for the treasured wildlife that shares my space. We also have, species at risk, Bald Eagles and a Pileated Woodpecker frequently sighted in the Goshen Project. I am currently working on more specific data on these treasures.

I am still at your service and will help in any way I can.

Yours sincerely.



AECOM

 300 – 300 Town Centre Boulevard
 905 477 8400 tel

 Markham, ON, Canada L3R 5Z6
 905 477 1456 fax

 www.aecom.com

Communication Record

Date	February 29 th , 2012		Time	~10:00 a.m
Between	Andrea Dart	and		
Telephone #			Project #	60155032
Project Name	Next Era - Goshen			
Subject	Tundra Swan Sightings			
Comments				
Tundra Swan si fields were still t	contacted me, Andrea Dart, on Feb ghting at his residence within the Go frozen and that he hasn't sighted an em. He is away on vacation from the sence.	oshen study y Swans yet	area. . As well	informed me that his, he will inform us when/if he
conceive a child	voiced his concern with wind turbin I. He has researched that cows and im I would pass his question onto so	l goats cann	ot concei	ve when they live near a
I forwarded on h	nis concerns to Mac Rose, the project	ct manager.		
Andrea Dart				

From: Friday, March 02, 2012 11:55 AM

To: Dart, Andrea Subject: more tundra data

Good Morning Andrea,

I wish you could have been with me this morning. The tundras would have put on a great show for you and no matter how many times I have experienced their migration and staging it still makes my heart soar. Here is more scientific feedback for you:

Time/Location: 9:15 am to 10:45 am , Friday, March 02, 2012, on the Goshen Line between Huron Street and Kirkton Road,

Numbers: fourteen (14) groups of tundra swans were sighted. The groups/flocks ranged in size from 15 to 75 swans. The total number 340 - 350 birds. These birds were passing over my head, as I walked, or closely to my right or left and easily counted using binoculars.

Direction: Most groups were heading west south west(WSW) with some going southwest(SW) and a few north west(NW). To their particular staging areas along the lake.

Two small groups of 15 to 20 in each were at a lower altitude (about 2.5 stories) that appeared fatigued and looking for a resting place.

At 9 am I heard the swans to the south west from my residence (corner of Goshen Line and Kirkton Road) in the resting place I discussed with Jessica at the open house in December, near proposed IWT # 67 Goshen Wind project. I went to investigate and hopefully take pictures and had to use the quad runner to access it. As I went east down the tree line my husband saw a flock of about 30 swans come from the region of the resting area. I didn't see them due to the trees and didn't hear them due to the noise of the quad. There were no swans in the resting area when I got there.

I hope your field team gets to observe next week as the tundras are early this year and peaking now. I went to Thedford Bog near Grand Bend yesterday, but only observed them at a distance deep in the bog. I'm sure the bog will be much more populated today. Contact Lambton Heritage Museum for details of what is happening in the bog. Please get your people up to speed with this info. They already know my questions and concerns it is they who should have questions and concerns to ask of me.

Yours sincerely,

Subject: RE: swans2

----Original Message-----

From:

Sent: Monday, March 12, 2012 14:24

To: Kamstra, James Cc:

Subject: swans2

Hello James,

We have a second wave of swans upon us which is more in line with the time that we normally see them. Saturday, March 10, at 6:30 pm a very large flock of 100+ swans flew over the intersection of the Goshen Line and Kirkton Road from SE to NW. Sunday, March 11, 2 flocks of 10 and one of 45 also flew over the Goshen Line at Kirkton Road at 7:45-8:15 am (daylight savings time) SE to NW. Also, Sunday morning a 1000+ swans were resting in a field of corn stubble, on the west side of Shipka Line between Kirkton Road and Huron Street. On Sunday evening 6:00 pm at the intersection of Blackbush Line and Dashwood Road/Hwy.83 in the NE corner 120+ swans were resting in a hay field and across the Dashwood Rd. in the SE corner 100+ swans were resting in a winter wheat field. I have attached 2 photos of these 2 groups. You can see Dashwood and Hayter's Turkey barns in the background. You were probably through there when you were here last week. This morning, Monday, another large flock, 65-70 swans flew SE to NW through the Goshen Line and Kirkton Road intersection at 7:50 am and this afternoon a flock of 30-35 circled and landed west of our house, on the south side of the Kirkton Road, in a hay field between the Goshen Line and Bronson Line. That is an update for you James and hopefully of some help.

Yours truly,

Message sent using Hay Communications webmail

From: Dudek, Derek To:

Subject: RE: Goshen - tundra swan location

Date: Wednesday, March 14, 2012 2:40:00 PM

Yes, please send them.

Derek Dudek | Community Relations Consultant

NextEra Energy Canada, ULC 5500 North Service Road, Burlington, ON L7L 6W6 o:905.335.4904 x18 f:905.335.5731

mobile - 519.318.0237

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From:

Sent: Wednesday, March 14, 2012 9:37 AM

To: Dudek, Derek

Subject: RE: Goshen - tundra swan location

Importance: High

Good morning: Your consultants should not wait until Monday because over half the swans have already left. The swans that are left are on the property across the road from our house. I have photos from Sunday showing the swans behind our house if needed. Thanks,

----Original Message-----

From: Dudek, Derek [mailto:Derek.Dudek@nexteraenergy.com]

Sent: March 14, 2012 9:23 AM

To:

Subject: Goshen - tundra swan location

Hello

We passed the information in our email along to our consultants at AECOM. They have conducted two rounds of Tundra Swan surveys in our Goshen study, which included driving all the east-west roads in these study areas. Based on the information that we have received from our field teams, no swans were observed in the vicinity of the property described below during these earlier surveys, however we have received another report of Tundra Swans in the area you describe by another landowner. Our consultants third field survey will be taking place next Monday and we will ensure that our field staff take a close look at that particular location then.

Thank you for providing us with this information.

Derek Dudek | Community Relations Consultant

Next Era Energy Canada, ULC

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From:
Sent: Monday, March 12, 2012 9:53 AM
To: SharedMailbox, GOSHEN-WIND
Subject: Contact Us
Below is the result of your feedback form. It was submitted by () on Monday, March 12, 2012 at 09:52:54
name: Market Market
emailAddress:
phoneAreaCode:
phoneNumber1:
phoneNumber2:
comments: We live at the commentation in South Huron and noticed in the past week a significant number of Tundra Swans landing and resting behind our property during their migration. I have looked at your proposed turbine locations and see there is proposal for a turbine on the property next to us. Has this been investigated as part of your turbine locating decisions? I have called the Ontario Ministry of Natural Resources and they are going to do a follow up on my report. Thanks,
Submit1: Submit Form

From:
To: Dudek, Derek

Subject: Tundra Swans Behind 70696 Shipka Line Date: Wednesday, March 14, 2012 11:03:19 PM

Attachments:

DSCF0404 (2), JPG DSCF0398 (2), JPG DSCF0399 (2), JPG DSCF0400 (2), JPG DSCF0402 (2), JPG

Hi Derek:

Here are the pictures of some of the swans behind our house. This is East of the Shipka Line and just North of the proposed turbines. There were considerably more (best estimate 1000 swans at minimum as the field was covered with them) across the road from our property to the West.

Thanks,

The message is ready to be sent with the following file or link attachments:

DSCF0404 (2)

DSCF0398 (2)

DSCF0399 (2)

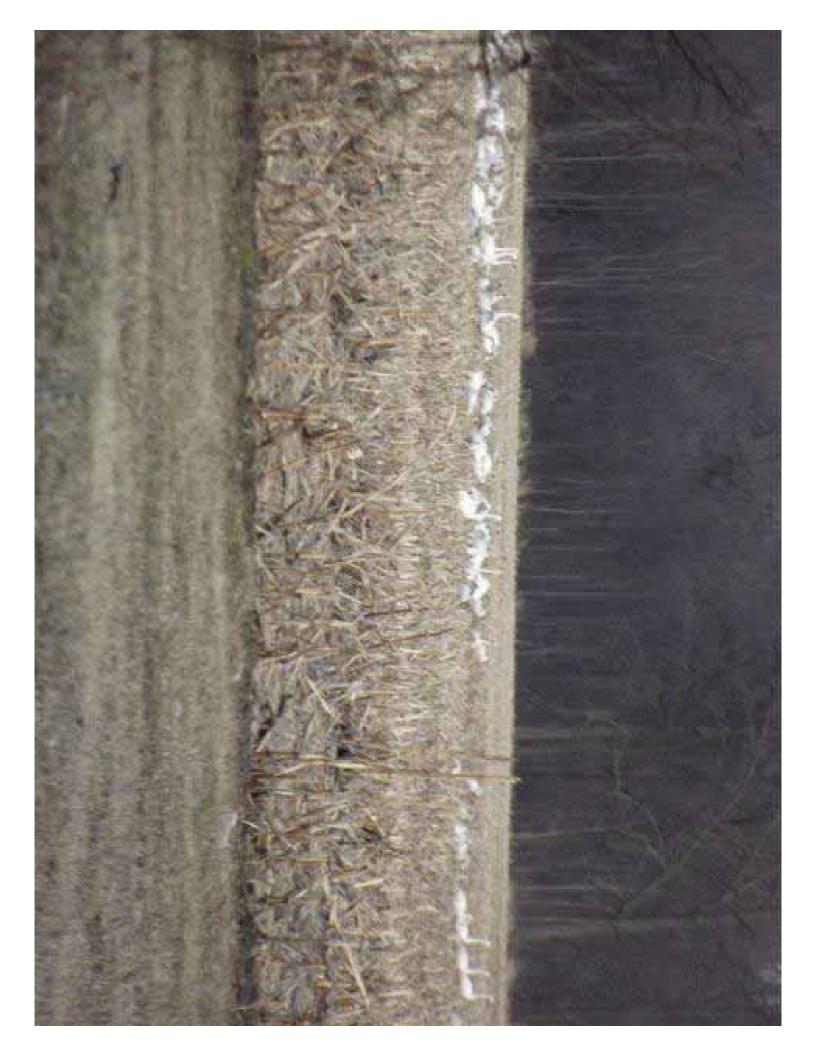
DSCF0400 (2)

DSCF0402 (2)

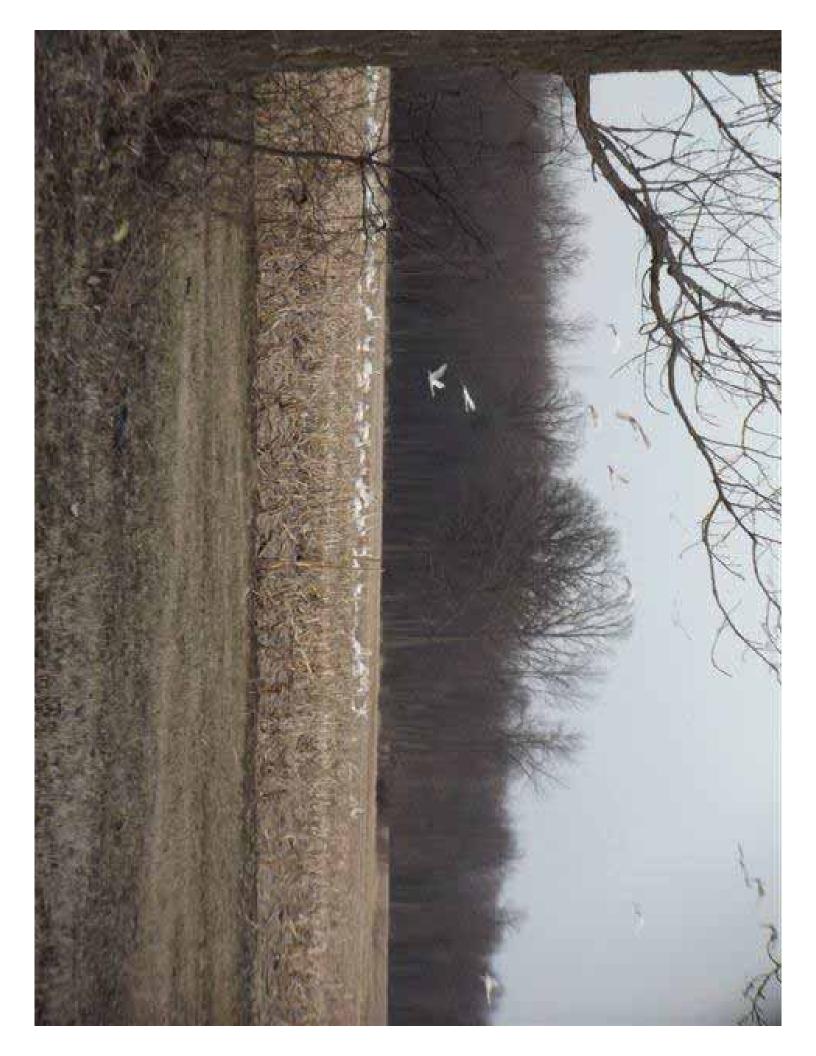
Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.











Subject: RE: swans 3

----Original Message-----

From:

Sent: Saturday, March 17, 2012 10:22

To:

Cc: Kamstra, James Subject: swans 3

Greetings,

Pictures 82, 83, 86 were taken Tuesday, March 13, morning at 10:30 am.

Location - the country 1 1/4 mile block with Pepper Dr. to the N; Bronson Line to the E; MacDonald Dr. to the S and Blackbush Line to the W.

In the middle of this block thousnds of tundra swans were observed resting.

Several of the fields in this location are corn stubble. Photo#82 taken from Pepper Dr. facing SE and #83 taken from Pepper Dr. facing S. Photo # 86 taken from the Bronson Line facing WNW.

Heads up on this location James...proposed IWT #9 in the Goshen Project would potentially be located right in the middle of these resting swans.

Also photos taken from Pepper Dr. would easily be within 120m from proposed IWT# 8. I wish I could send better photos but the distance and my little camera prevent more professional pics.

Photo #87 is the Shipka Line location I previously mentioned. This is NE of the Shipka Line and Huron St. intersection. There were a few hundred there on Tuesday at 11:00am and had decreased in numbers since the weekend. Also in the NE corner of Blackbush Line and the Dashwood Rd./Hwy.83 the group had increased in size by 100+ swans. All of these locations are common annual resting places. The swans are pretty much finished their staging here for this year. Also, a point of interest, I saw a small flock of swans in Bruce county just south of Mildmay Thursday Mar. 14. as I was walking.

I hope this will be of further use to you. Sadly, it hasn't been a 'normal' year for you to come and see the swans first hand.

Sincerely

Message sent using Hay Communications webmail



April 12, 2012

Zurich Chamber of Commerce Box 189 ZURICH, ON. NOM 2T0

To The Members of the Zurich and District Chamber of Commerce:

The purpose of this letter is in response to your email of March 8, 2012, authored by Robert Westlake, on behalf of the Chamber. In this email you request the following:

As an alternative to our request of November 16, 2011, December 6, 2011 and January 24, 2012, we are prepared to except no boundary change or a limited boundary change. In this case, the turbines in the Goshen Project known as "2", "3", "4", "7" and "10", are still within the project boundaries, however they will be only located where they are shown in Aecom's December 2011 map. In this case we require a letter from NextEraEnergy that states that apart from the five turbines previously mentioned, no additional wind turbines will be installed now, or in the future, within the Goshen Project north of a line running east and west one half the distance between Sararas Road and Pepper Road. This letter from NextEraEnergy will be addressed to Zurich and District Chamber of Commerce and the Municipality of Bluewater. The letter shall be part of the documents included with Goshen Project and said letter shall be included with the application for project approval from the Province of Ontario. [sic]

It is our preference to not comment on any future activities, but rather to deal with them on a case by case basis with input from stakeholders, including yourselves, if and when such matters arise. We are currently working on the wind turbine layout as referred to in your description above and welcome any comments on this and any other matters related to our project through ongoing discussion, which will be fully documented in our Consultation Report that is submitted to the Province as part of our Renewable Energy Approval (REA) package. Should any matters change in the future we would fully expect to engage with your group to discuss any concerns you might have. It is our opinion that our layout is mindful of past requests by the Chamber to site turbines a distance from the Village of Zurich which allow for growth of the Village, and ensures compliance with Provincial regulations put in place to protect public health and safety and the environment.

This letter will be included in our Consultation Report which forms part of our overall Renewable Energy Approval application to the Ministry of the Environment. We have copied the CAO on this matter and will request that this letter be circulated to Council for their information.

Thank you,

Derek Dudek

DA DA

Community & Municipal Relations Consultant

CC: Stephen McAuley, CAO, Bluewater Julia Cushing, AECOM

From: Dudek, Denti

Subject: Re: Bluewater - Varna Wind Inc - Question to Marc Rose

Date: Friday, June 08, 2012 10:52:04 AM

Good morning Mr Dudek I am still looking for the map described below for the Goshen Project. As discussed previously with you HONIs policy requires a 500mt setback from their 500KV line esmt. to the cement base of your turbines. Do You have any written correspondence yet from HONI approving your draft site plan to build 15 of your turbines closer than 500mt to the 500kv corridor that passes through your study area. If you do please forward it to me.

Thanks

---- Original Message -----

From: Dudek, Derek

To:

Sent: Thursday, May 10, 2012 9:26 PM

Subject: RE: Bluewater - Varna Wind Inc - Question to Marc Rose

Hello

Yes we could do that for Goshen once the new draft layout is released which should be in the very near future. Bornish, Adelaide and Jericho would not include any turbines within 1km of that line.

Derek Dudek | Community Relations Consultant

NextEra Energy Canada, ULC

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Sent: Thursday, May 10, 2012 11:20 AM

To: Dudek, Derek

Subject: Re: Bluewater - Vama Wind Inc - Question to Marc Rose

Greetings Mr. Dudek Thank You for your reply. You also have proposed projects named Goshen, Bornish, Jericho, and Adelaide. Do these projects also have turbines located with in 500 meters from HONIs Bruce to London 500KV line?? If they do could you please send me maps for each project showing turbines located within 1KMof that 500KV Line as you did for the Bluewater Project. THANK YOU

---- Original Message -----

From: <u>Dudek</u>. Derek

To:

Sent: Thursday, May 10, 2012 10:27 AM

Subject: RE: Bluewater - Vama Wind Inc - Question to Marc Rose

Hello

Please see attached a map that shows all of our proposed turbine locations within 1km of the 500kv line. As indicated earlier, HONI has reviewed these locations and have not indicated any issues of concern. In addition, I can confirm that the authority for establishing setbacks in the Province of Ontario lies with the Ministry of the Environment. As such, the 500 metres you refer to is not a regulatory requirement, but rather a "consultation zone" or "soft setback" that requires consultation with HONI to address any areas of concern. As such, we feel that we have addressed all of HONI's concerns with respect to this matter.

In addition, the FIT contract we received last year does not represent approval of turbine locations, but rather it is a contract to sell electrical power to the Province. The Renewable Energy Approval (REA) is the approval tool which dictates the location of turbines. We have not yet received a REA for the Bluewater Wind Energy Centre Project.

Thank you,

Derek Dudek | Community Relations Consultant

NextEra Energy Canada, ULC 5500 North Service Road, Burlington, ON L7L 6W6 o:905.335.4904 x18 f:905.335.5731

mobile - 519.318.0237

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From:

Sent: Tuesday, May 01, 2012 10:46 AM

To: Dudek, Derek

Subject: Re: Bluewater - Varna Wind Inc - Question to Marc Rose

Greetings MR. DUDEK I did receive your E mail last April 04 2011 and your answer was inconclusive, that was the reason my most recent inquiry (1 year later) was directed to Marc Rose at AECOM. I thought at this stage of your project the people assembling your reports would have a definitive answer to my request. As mentioned in my April 25 2012 E mail to Mr. Rose my inquiry to HONI on setbacks from IWTs resulted in a reply stating that their policy required IWTs to be setback 500 meters from a 500KV easement to the concrete base of the IWT and that policy has been in place since July of 2008. Your Email on April 25 2012 states you are currently in discussions with HONI on setbacks. Why do you not recognize the HONI policy? How can you go ahead and ask for a FIT Contract when you DO NOT have the official final plan for the turbine locations avaliable for the public to view and comment on?? THANKS

---- Original Message -----

From: Dudek, Derek

To:

Sent: Wednesday, April 25, 2012 4:58 PM

Subject: Bluewater - Varna Wind Inc - Question to Marc Rose

Hello

Your email was forwarded to me by Marc Rose, from our consultants AECOM. As background, I believe I emailed you on April 4, 2011 on this very matter. Perhaps you did not receive the original email.

Your question relates to setbacks from the 500kv Hydro One Networks (HONI) line running through our Bluewater Wind Energy Centre. Our understanding of the situation based on our discussions with HONI is that there is no specific setback through regulation, and that we must consult with HONI on a proposed layout where turbines are located within 1km of HONI infrastructure. We are currently undertaking those discussions with HONI.

Please do not hesitate to contact me if you have any other questions.

Derek Dudek | Community Relations Consultant

NextEra Energy Canada, ULC 5500 North Service Road, Burlington, ON L7L 6W6 o:905.335.4904 x18 f:905.335.5731 mobile - 519.318.0237 derek.dudek@nexteraenergy.com

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From: To: Subject:

Date:

Dudek, Derek

Goshen - inquiry

Wednesday, May 23, 2012 4:56:00 PM

Hello

Thank you for your interest in the Goshen Wind Energy Centre. NextEra Energy is a premier power company that is proposed of several subsidiaries including both Florida Power and Light (FPL) and NextEra Energy Resources / NextEra Energy Canada.

- FPL is the vertically integrated electrical utility in the state of Florida, that with 4.5 million accounts is one of the largest electrical utility companies in the USA.
- NextEra Energy Resources / NextEra Energy Canada is a wholesale electrical generation company and the leading wind energy operator in North America. NEER/NEEC owns and operates over 16,000MW of electrical generation facilities in 22 US states and 4 Canadian provinces. With respect to wind energy specifically, NEER/NEEC operates approximately 8500MW of wind power, and has a proven track record of operational excellence and environmental leadership.

Please don't hesitate to contact me with any other questions regarding NextEra or our Goshen Wind Energy Centre. Please visit our websites to learn all about our family of companies at: http://nexteraenergyresources.com/home/index.shtml
http://www.nexteraenergycanada.com/

Derek Dudek | Community Relations Consultant

NextEra Energy Canada, ULC

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From:

Sent: Wednesday, May 23, 2012 3:23 PM

To: SharedMailbox, GOSHEN-WIND

Subject: Contact Us

Below is the result of your feedback form. It was submitted by

() on Wednesday, May 23, 2012 at 15:23:11

s

From: Dudek Derek
To:
Subject: Goshen - Inquiry
Date: Monday, May 28,

Monday, May 28, 2012 10:12:00 PM

Hello

We do not have any plans for a second phase of the Goshen Wind Energy Centre. Generally speaking, wind projects are considered very compatible with agricultural areas for the small amount of land that is required to be removed from agricultural production (ie. 1 - 1.5 acres per turbine). In addition, a wind turbine does not place any limitations on surrounding agricultural land uses, while farmers benefit from a guaranteed source of income on that portion of their lands.

Thank you,

Derek Dudek | Community Relations Consultant

NextEra Energy Canada, ULC 5500 North Service Road, Burlington, ON L7L 6W6 o:905.335.4904 x18 f:905.335.5731 mobile - 519 318 0237

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name:

emailAddress:

comments: So when can we expect PHASE 2 to make it's appearance in our rural community. Our agricultural land is being taken away from us so you can make money...do you like to eat? I would suggest you stop taking our farm land away so we still have food to eat in the future! Human's need food to survive not energy!

Submit1: Submit Form

.....

From: <u>Dudek, Derek</u>
To:
Subject: Goshen - Inquiry

Date: Monday, May 28, 2012 8:37:00 PM

Hello

All are turbines will be new GE 1.6MW turbines.

Derek Dudek | Community Relations Consultant

NextEra Energy Canada, ULC

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From:

Sent: Friday, May 25, 2012 10:50 AM To: SharedMailbox, GOSHEN-WIND

Subject: Contact Us

Below is the result of your feedback form. It was submitted by () on Friday, May 25, 2012 at 10:50:22

name:

emailAddress:

phoneAreaCode:

phoneNumber1:

phoneNumber2:

comments: Are the turbines which you hope to plant in South Huron new or have they been dismantled someplace and intend to be reassembled here?

Submit1: Submit Form

.....



www.canadapost.ca 120529 19:16 ///

www.rostescanada.ca N5Y 180 ///

Burlington, ON L7L 6W6 c/o NextEra Energy Canada, 5500 North Service Road, Suite 205, Goshen Wind, Inc.

Wind turbines, solar panels prove inefficient, costly

It was a delight to see Katle Holman's eloquent lettes Let's focus green' energy on affordable technology (March 23) and Ezra Levant's column, both of which express my sentiments on the Dalton McGuinty flasco

regarding green energy.

The truth is that the wind turbines and solar panels we see dotting our landscape produce very little energy at enormous cost to the taxpayer. Yes, these unsightly things marring our landscapes and being erected at lightning speed in an apparently disorganized panic are being subsidized by you and me and further contributing to Ontario's enormous deficit.

In no way do I object to reasonable and sustainable efforts to provide us with alternate forms of energy, but the haphazard approach of the Ontario government is ridiculous. The waste of billions and billions of dollars is

deplorable.

I do understand that a new industry has been created to crect these behemoths, employing some Ontarians, making a few contractors rich. Others who benefit are the people who lease their valuable farm land to accommodate these unsightly structures and those who are paid unrealistically high rates for selling back to us the power that is produced. Foreign manufacturers are getting rich, all at our expense. It's hard to believe that serious consideration is being given to also erect wind turbines in the waters off our Great Lakes beaches.

The random inefficiency is apparent everywhere. Access roads and control buildings are everywhere cutting up farmers' fields. Acres and acres of arable land are being destroyed. Millions of kilometres of electrical cables are running in all directions. All this waste under

the guise of the feel-good "green" label."

The entire program seems to be totally unorganized. Why not erect wind turbines and solar structures away from homes, on non-arable lands in straight rows with some semblance of purpose and efficiency as is done in parts of Europe and the U.S. Large buildings can be made more energy self-sufficient by putting solar panels on the roof. There are many other ways to approach sustainable forms of energy.

Let's not put all our billions into one (waste) basket. Let's think about energy conservation systems. I'll bet that would yield a greater amount of energy with far less invested. Let's think about the ugliness and the enormous waste that will remain long after McGuinty has retired.

Tom Vermue Ilderton

Hey, let's be nice and share wind turbines with GTA

With all of the debate raging about wind turbines, I have a simple suggestion that I think would solve the

It appears the vast majority of residents of the Greater Toronto Area, Burlington, Hamilton, Stoney Creek, and all the way out to Oshawa support Premier Dalton

McGuinty's Green Energy Act.

The shorelines of Lake Huron, Lake Superior and ake Erie have already taken on their fair share of urbines. Why are there not an equal number dotting he shoreline of Lake Ontario, specifically in the Toronto rea? You could easily fit 2,000, 2.5-MW turbines from familton to Oshawa, thus attaining McGuinty's goal of 0,000 MW in one fell swoop.

Plus, it would solve many other problems.

The power would be produced closest to where it is lost used and needed. It would help reduce that area's ependency on fossil fuel and its carbon footprint and nprove air quality.

You wouldn't have the transmission problems and asts because you could tap directly into the grid right

here it's needed most.

stario And if.....

McGuinty wants to be known as a world leader in the een energy movement. What greater feather to put in s cap than to be able to state that one of the largest cits in Canada, is powered by its own turbines? I'm not talking about a dozen or so turbines. I mean te every 150 metres (500 feet) — from Hamilton to

shawa, just like they're doing all over rural southern

And not little 90-metre (300-foot) turbines like the one at Exhibition Place. They should be the same size as in rural Ontario — 180 metres (600 feet) tall. Or even better the newest size — 300 metres (1,000 feet) tall. Imagine the power you could generate with those.

There would no longer be the need for the FIT program, which pays farmers billions of dollars over 20 years for the use of their land. Since the Green Energy Act can decide where to put these industrial structures, why can't the Liberal government expropriate all of the Lake Ontario shoreline and build to its heart's content?

It would satisfy environmentalists in the GTA who accuse rural Ontario of NIMBYism. They could lead by

And finally, it would preserve the much-needed fertile farmland for food production and eliminate the need to encroach on fragile ecosystems and nature areas. Rural residents can once again turn their attention to the farming and urban residents can do their part by producing their own energy.

With all of these positives, why has it not yet been done? When are the residents of Toronto and the GTA going to petition the McGuinty government for full turbine construction all along the GTA shoreline (as well as off-shore)? Why does the responsibility, for providing the GTA with its vast demand for power rest in the lap of rural Ontario? Can anyone answer these questions?

To Whom it May Concern,

My husband and I are very upset about the wind turbines proposed for our area and, especially so now as we shall have to move out of our lovely rural home. We are an elderly couple and have always endeavoured to be agreeable to change. We have put many of our retirement funds, much time and effort into improving an old farmhouse. We feel we have done our bit to conserve, including planting over 40 trees and numerous shrubs, how about you? Wind turbines on such a large scale will not conserve energy, merely fill the pockets of big industry. Small individual wind turbines, those constructed on homes, together with geothermal power and rooftop solar panels make far more sense. Since we own only a small (1 ½) acre) piece of land, that means we shall be in the midst of a group of turbines.

We have always needed to live in cities prior to our move here, ergo we don't need to see, or hear the constant humming of a "city" of windmills, and please, do not insult me by claiming there is no noise, no danger of sleepless nights, no headaches, etc. There is! I encountered them in Norfolk and Suffolk in the U.K. The sound is obnoxious. Not only are they wasting valuable arable land, so sorely needed in order to give food aid where truly required, but they are downright ugly. Where is your sense of beauty?

It is certainly interesting to note that there appear to be no wind turbine farms located in either the Federal or Ontario Provincial Environment Ministers ridings, nor in Ottawa South. One wonders why.

As for property values, can anyone guarantee that our haven will even be worth that which we paid for it? I cannot imagine that a purchaser would be willing to give us the current value - or more - once those monstrosities are erected. How will our children get a FAIR & EQUITABLE price once we have departed? Yes, I know; there are no guarantees in this life, but surely there is FAIRNESS? Has anyone seriously counted on the probable numerous legal battles which inevitably will ensue? I believe there are already some being fought in Grey county.

Already there are solar panels idly sitting in many fields: they are not currently in use because the existing hydro lines cannot absorb any more electricity, the excess of which is being sold or given away! What an abominable waste of our tax dollars, especially as we are already repaying an enormous debt to Ontario Hydro which will continue at the rate of \$285m. per year for the next 20 years. That is due to the "Feedin-Tariff" awarded by the Ontario Power Authority. And what about the longevity of the turbines? Their life expectancy is, apparently, a mere 20 years.

It is fully time for governments and big businesses to stop hiding important issues and facts with which they see fit to "blindside" the general populace. We are only too aware that these turbines are being manufactured mainly overseas. Let's give Canadians the job of constructing viable alternatives such as suggested above, and these alternatives would inevitably cost us all far less, both in angst and dollars.

Kudos to those persons who promote Green energy such as rooftop gardens on skyscrapers in order to retain heat, or small rooftop turbines together with rooftop solar panels such as the ones on the roof of the Farmer's Market in Halifax.

As for our guaranteed health safety, the doctors whose claims about no health hazards all work either for the government or the turbine companies!

Yours truly,

Attached: 2 London Free Press letters

Owen, Jennifer

From: MacKay Ward, Jessica

Sent: Wednesday, May 30, 2012 12:06 PM

To: Hernandez, Joselen; Geneau, Nicole; Bird, Thomas

Cc: Rose, Marc; Owen, Jennifer; Andrew Ryckman; Kamstra, James

Subject: Goshen PIC Questions

Categories: Follow-up

Hi Josie, Nicole and Tom,

Please find below questions and comments I wrote down during the Goshen PIC last night in Exeter. There is one question requiring follow up from NRSI – Andrew: could you please provide a response?

- Someone asked a question about NRSI's bat studies. They wanted to know what post-construction bat studies
 NRSI has done for other wind project, which projects, and specifically whether NRSI has completed bat studies
 for Shelburne and Wolf Island. They also wanted to know what the results of those studies have been with
 respect to bat mortality. Contact information:
- reported seeing Tundra Swans occasionally in the field behind her house, approximately between
 Turbines 74 and 53. The Swans do not go there every year. Her address is
 the location of the Tundra Swans on the large map during the meeting. She did not want to provide her phone
 number for us to follow up.
- Someone asked for me to send them the link to the page on NextEra's website where they can download the Bluewater NHA report. Contact information: I will send her the link today.

Regards,

Jessica

Jessica MacKay Ward, Ph.D.

Ecologist

AECOM

300 Town Centre Blvd, Suite 300, Markham, ON, L3R 526

Tel: 905-477-8400 ext. 225

Fax: 905-477-1456

Jessica.MacKavWard@aecom.com

From: To: Dudek Dere

Subject: RE: Goshen - site inquiry

Date: Friday, June 01, 2012 11:27:29 AM

Thank you for getting back to me so quickly. Now the real challenge begins – to try and sell my house with a wind turbine proposed in my back yard.

From: Dudek, Derek [mailto:Derek.Dudek@nexteraenergy.com]

Sent: June-01-12 11:22 AM

Subject: Goshen - site inquiry

Hello

We are in the early stages of siting an Operations and Maintenance building for our Goshen and Bluewater projects, which will be sharing a facility. The site we will be looking for must be permitted to include warehousing and office space in accordance with South Huron and/or Bluewater Zoning By-laws. Unfortunately the AG4 Zone for either municipality does not permit such uses. This is further enforced through the Official Plans of both municipalities which encourage such facilities to be located in designated settlement areas or industrial areas to take advantage of proximity to existing services and infrastructure. As such, we will be working closely with staff in both municipalities, as well as the County, to find a suitable location which meets the goals, objectives, and regulations for the type of building being proposed.

Thank you,

Derek Dudek | Community Relations Consultant

NextEra Energy Canada, ULC 5500 North Service Road, Burlington, ON L7L 6W6 o:905.335.4904 x18 f:905.335.5731

mobile - 519.318.0237

derek.dudek@nexteraenerev.com

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name:		
emailAddress:		
nhoneAreaCode		

phoneNumber1:

phoneNumber2:

comments: Hello you are currentl

comments: Hello you are currently in the process of planning a wind project in Southwestern Ontario - the Goshen Project where a wind turbine will be erected in my back yard as per the diagrams that I have seen. We are in the process of prepping our 0.8 acre property for sale and wondered if you would be interested in purchasing it for your operations and maintenance facility. It is the only residence in this block surrounded by farmland and extremely close to your proposed project. We will be putting it on the market within 2-3 weeks and thought i would just send you an email in advance of listing it. The 911 address in case you are interested is 37812 Crediton Road between the Goshen and Bronson Line and it is a fairly large residence that could easily be transformed into offices and meeting spaces as well there is a workshop on the property. Would love to know if you would be interested in this or possibly you have already sourced a location for your operations and maintenance facility. It is zoned AG4.

Submit1: Submit Form

From: Hernandez, Joseins on behalf of SharedHallbox, GOSHEN-WIND.

Tet <u>Dudek, Derek</u>
Ce: <u>Geneau, Nicole</u>
Subject: FW: Updated maps

Date: Monday, June 11, 2012 9:06:09 AM

From:

Sent: Wednesday, June 06, 2012 9:33 AM To: SharedMailbox, GOSHEN-WIND

Subject: Updated maps

Attention: Derek Dudek

I am attempting once again to view the maps for the Goshen project at http://www.nexteraenergycanada.com/pdf/goshen/60155032GSH_SiteLocationMap_11x17.pdf after more than 1/2 hour the map still has not loaded.

Please email me the latest maps for Goshen & Bluewater which were displayed at the the meeting in Exeter last week. Also, please email me the latest maps for Jerico, Bornish and Adelaide projects.

Were you able to find an answer for me regarding the property values study done in the Chatham Kent area? Were seperate studies done on agricultural and residental properties?

Thank you,

From: <u>Dudek, Derek</u> To:

Subject: RE: Goshen - OX property value study Date: Monday, June 11, 2012 10:09:00 AM

Hello

If you go to <u>www.nexteraenergycanada.com</u> under proposed projects there will be maps for Bluewater and Bornish. Best maps are under the "Draft Site Plan Report" tab. There are also paper copies of all the documents at the Bluewater municipal offices in Zurich (Bluewater) and at the North Middlesex municipal offices in Parkhill (Bornish).

I'll inquire if the Goshen layout that was shown at the last meeting will be posted soon.

Jericho does not have a layout posted yet...it is a bit earlier in the process than the other projects.

Let me know if you arent able to access them.

Derek Dudek | Community Relations Consultant

NextEra Energy Canada, ULC 5500 North Service Road, Burlington, ON L7L 6W6 o:905.335.4904 x18 f:905.335.5731 mobile - 519.318.0237

derek.dudek@nexteraenergy.com.

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From:

Sent: Monday, June 11, 2012 9:31 AM

To: Dudek, Derek

Subject: RE: Goshen - CK property value study

Hello Derek: Thank you for your reply.

Can you tell me when we will be able to access updated maps on line for Goshen & Bluewater on line? Are maps available for Bornish & Jericho?

Thank you,

From: Derek.Dudek@nexteraenergy.com

Too

Date: Thu, 7 Jun 2012 15:39:07 -0400 Subject: Goshen - CK property value study

Hello

Nice to meet with you last week at our meeting in Exeter. Just wanted to follow up with a question you had regarding the Wind Energy Study - Effect on Real Estate Values in the Municipality of Chatham-

Kent, Ontario. You asked me (and correct me if I'm wrong) whether or not the study took into account the resale values of both farm parcels as well as smaller "estate residential" lots. The thought being that the larger farm parcels would always rise in value and counter any loss on the smaller lots, thus showing no significant net change overall.

I followed up with one of the authors George Canning to confirm what the methodology was. He confirmed that it was only smaller estate residential lots that were studied. Farm parcel sales were not included as part of the overall study.

I hope this answers your question and addresses your concern. However, if you have any other questions about our project or require more information please don't hesitate to contact me.

Thanks,

Derek Dudek | Community Relations Consultant
Next Era Energy Canada, ULC
5500 North Service Road, Burlington, ON L7L 6W6
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From: <u>Dudek, Derek</u> To:

Subject: RE: South Huron Council meeting
Date: Friday, June 22, 2012 11:45:00 AM

Hello

We don't have anything planned at this time. We try to work with staff and Council to arrange appropriate times at their discretion. I will try and keep you posted if we schedule anything in the near future.

Thanks,

Derek Dudek | Community Relations Consultant

NextEra Energy Canada, ULC 5500 North Service Road, Burlington, ON L7L 6W6 o:905.335.4904 x18 f:905.335.5731 mobile - 519.318.0237

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From:

Sent: Wednesday, June 20, 2012 8:51 PM To: SharedMailbox, GOSHEN-WIND Subject: South Huron Council meeting

When will your representatives be requesting a delegation to a Special meeting of South Huron Council?

Exeter ON

To: Derek Dudek, Community Relations Consultant NextEra Energy Canada, ULC 5500 North Service Road, Suite 205 Burlington, ON, L7L 6W6

> Ref: Goshen Wind Energy Centre Location:Bluewater, South Huron, Huron County, Ont.

Dear Sir,

There probably is no "right" way to generate electrical energy to satisfy the needs of the billions of humans living on planet earth. We use fossil fuels, flowing water and nuclear fission as a means to produce electric power, all of which have their advantages, and disadvantages, from a scientific, environmental and philosophical aspect.

Along come the wind blowing advocates. Their approach is that by erecting monumental wind turbines in our rural areas we shall have green energy and the earth shall be saved from global warming. Amen! Maybe? But not everyone wants to see huge wind turbines scattered hither and thither in the countryside.

I know I don't. I believe in the wind, but not turbines. In my view they are an aesthetic obscenity, a blight on the landscape and, I have heard, not healthy for our flying creatures, and in some cases, not even conducive to the well being of some humans. Also, that property values adjacent to wind farms may substantially decrease.

Why not COMPROMISE? Here are a couple of ideas.

Let our bright engineers develop a method of installing the turbines in our lakes.
 Aesthetically they would be more compatible within the lakescape than the landscape.

2. If we must have them erected on our rural land, then can you make the beastly things less obtrusive? PLEASE!

4th. July, 2012.

From: To: Subject: Dudek, Devek Goshen - Inquiry

Date: Friday, August 24, 2012 3:00:00 PM

Hello

My apologies for the late reply, but this email got accidently placed in the wrong folder. Unfortunately the answer to your question is confidential as it would related to our project. In addition, there is no general answer I could give as it as a case by case calculation based on the chosen turbine technology, size of overall project, construction costs etc.

Thanks,

Derek Dudek | Community Relations Consultant

NextEra Energy Canada, ULC 5500 North Service Road, Burlington, ON L7L 6W6 0:905.335.4904 x18 f:905.335.5731 mobile - 519.318.0237 derek.dudek@nexteraenergy.com

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From:

Sent: Thursday, July 05, 2012 3:34 PM To: SharedMailbox, GOSHEN-WIND Subject: Renuewable Energy Project

Quick question for you Derek, from one business owner to you,

How long before these turbines are actually making money? (including upkeep)
Thank you.

From:
To: <u>Dudek, Denek</u>
Subject: Goshen Turbines

Date: Tuesday, July 24, 2012 11:43:19 AM Attachments: 60155032 GSH Projectionation of

Hello Mr. Dudek

Attached is the draft site plan map for the Goshen Wind Energy Centre.

There is a big black box (corner of Main St and Mollard line near Grand Bend). What is it?

There appears to be no legend for it marked on the map.

Thank you

From: Dudek Derek
To:
Subject: RE: MAPS

Date: Tuesday, July 31, 2012 1:32:00 PM
Attachments: 60159032 GSH Projectiocation.pdf
Transl.ineMap2012-06-08.pdf

Hello

I had previously sent through a map on June 11th...did you not receive it?

At any rate attached is the map I sent through on the 11th, as well as the entire layout.

(Note: the Alt turbines have been renumbered on the map showing entire site plan).

Thank you,

Derek Dudek | Community Relations Consultant

NextEra Energy Canada, ULC 5500 North Service Road, Burlington, ON L7L 6W6 o:905.335.4904 x18 f:905.335.5731 mobile - 519.318.0237 derek.dudek@nexteraenergy.com.

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From:

Sent: Tuesday, July 31, 2012 12:44 PM

To: Dudek, Derek Subject: MAPS

Greetings Mr. Dudek On May 10th 2012 you promised to send me a map of the Goshen wind project showing the IWTs that are within 1 km of the HONI 500kv transmission line that passes through the Goshen wind project when it became avaliable. Could you please forward it to me at this time. THANKS

From: To: Subject: Dudek, Derek

Goshen - Inquiry

Friday, October 26, 2012 3:43:00 PM

Hello

Date:

Thank you for your inquiry. Please find below our response to your questions. Also, I believe that you are referencing the WHO Guidelines for community noise 1999. Its important to note that the 30 dB LAeq limit in that document is an <u>indoor limit</u> – Section 4.3.1 – <u>indoor guideline</u> values for bedrooms are 30 dB LAeq for continuous noise and 45 dB LAmax for single events.

The WHO Night Noise Guidelines for Europe 2009 make reference to recommendations which are in line with Ontario guidelines. Section 5.6 – Night Noise Guideline (NNG) L_{night, outside}=40 d8 (This is an outdoor limit).

1. What noise levels do your IWTs emit at 550m?

This varies depending on proximity of turbines to each other. Generally speaking a single GE 1.6MW turbine would have a noise level of just under 40dBA at 550 metres.

2. If the about answer is greater than 30dB, how far away would the IWTS need to be to ensure the safer level of 30dB?

We have not used 30dBA as a threshold level in our models, and as such we have not determined setback distances that would be associated with that level.

3. How often are the noise levels checked?

Noise levels would be checked in accordance with the conditions of our Renewable Energy Approval (REA) that we are applying for with the Ministry of the Environment (MOE). Based on our experience with our other projects which have received an REA, this would be done at least twice following the commencement of operations during periods of year with the lowest ambient sound.

4. What operational project do you have where your IWTS are as concentrated as on Mollard Line?

NextEra Wind expects to have close to 100 operational wind energy facilities in North America by the end of the year and many of them have turbines in similar proximity to each other. Siting of turbines is a complex process taking into account machine design, ambient conditions and local/federal/provincial laws and requirements.

Please don't hesitate to contact me if you have any other questions.

Derek Dudek | Community Relations Consultant

NextEra Energy Canada, ULC 390 Bay Street, Suite 1720 Toronto, ON M5H 2Y2

Canada

office: 416.364.9714 mobile: 519.318.0237

derek_dudek@nexteraenergy.com

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From:

Sent: Friday, October 19, 2012 5:05 PM

To: Dudek, Derek

Subject: Re: NextEra Energy Newsletter omission

Mr Dudek,

I'm quite concerned about the noise and vibration emitted from your IWTs. Many jurisdictions worldwide are asking for a 2km to 10km setback to ensure the noise levels meet the World Health Organization recommendations of less than 30dB to the nearest property. An Ontario Senior Environmental officer concluded that the current limit of 40 decibels should be reduced to 30 –32 dB

- What noise levels do your IWTs emit at 550m?
- 2. If the about answer is greater than 30dB, how far away would the IWTS need to be to ensure the safer level of 30dB?
- 3. How often are the noise levels checked?
- 4. What operational project do you have where your IWTS are as concentrated as on Mollard Line?

Thanks

From: <u>Dudek</u>, <u>Derek</u>

Sent: Thursday, August 23, 2012 3:10 PM

To:

Subject: RE: NextEra Energy Newsletter omission

Hello

The distances I quoted in my previous email are between the base of the tower.

I'm not sure there is any one reason for the concentration of turbines in the area you'd inquired about, but rather it is a combination of several of the reasons I'd indicated. For certain, there are fewer residences directly fronting onto Mollard Line in this area.

I hope this answers your question, but please don't hesitate to contact me with any further questions.

Thanks,

Derek Dudek | Community Relations Consultant NextEra Energy Canada, ULC 5500 North Service Road, Burlington, ON L7L 6W6

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From:

Sent: Friday, August 10, 2012 10:51 PM

To: Dudek, Derek

Subject: Re: NextEra Energy Newsletter omission

Mr Dudek,

Just to clarify, the 600 – 900 metres apart that you mention, is that from wing tip or from the base?

Also what is the reason for the higher density in the area I questioned?

Thanks

From: <u>Dudek</u>, <u>Derek</u>

Sent: Friday, August 10, 2012 2:48 PM

To:

Subject: RE: NextEra Energy Newsletter omission

Hello

All of those turbines range from between 600 - 900 metres apart between their closest neighbouring turbine.

There are actually clusters of turbines closer than this including 80, 19, 20, 85, 66 over southwest of Dashwood, which range between 500 and 600 metres. Reasons for greater densities can be attributed to many things including better wind, more contiguous landowner participation, fewer non-participating residences, fewer woodlots or other natural features.

I hope this answers your questions. Please don't hesitate to contact me if you have any other questions.

Thanks.

Derek Dudek | Community Relations Consultant

NextEra Energy Canada, ULC 5500 North Service Road, Burlington, ON L7L 6W6 o:905.335.4904 x18 f:905.335.5731

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From:

Sent: Friday, August 10, 2012 1:51 PM

To: Dudek, Derek

Subject: Fw: NextEra Energy Newsletter omission

Mr Dudek.

In looking at the attached map, I noticed that the 12 proposed wind turbines on either side of Mollard Line seem too close together.

- Can you please tell me how close they are to each other. Another wind project executive said they must be 500 metres apart.
- Also can you please tell me why one would need so many is such a small area. I don't see that anywhere else on this map.

Please advise.

From: Sengel, Seven

To: Geneau, Nicole; Hernandez, Joselen; Dudek, Derek

Subject: FW: Contact Us

Date: Thursday, September 20, 2012 7:57:03 AM

-----Original Message----From:
Sent: Thursday, September 13, 2012 8:40 PM
To: SharedMailbox, FPLENERGY
Subject: Contact Us

Below is the result of your feedback form. It was submitted by () on Thursday, September 13, 2012 at 20:40:12

name:

emailAddress:

phoneAreaCode:

phoneNumber1:

phoneNumber2:

comments: Re" Goschen wind Energy Project- Huron County Zurich, Ont Canada. The telephone town hall meeting held tonight at 6:30p.m. was appreciated. When I commented on a health issue of equilibderium inbalance experiences I get, when driving near the turbines, there answer was to see a doctor, that's fine but it doesn't change the known fact this remains a big issue for me and unlike staying away from moving water I can't get away from turbines as they if constructed on the goschen area, this is where I live near.

I expect Next Energy to compensate me for this unwanted affect if constructed.

I do not like the astetic affect it has for our country municipality., like a lot of other people I have talked to.

I submit my name of disapproval of turbines.

Submit1: Submit Form

From: <u>Dudek, Derek</u> To: Subject: RE: Hi again

Date: Thursday, October 18, 2012 1:24:00 PM

Hi

I heard back from the team....nothing has changed. Does just want to know where the poles are in relation to the parcel we'd been talking about previously, or is there other parcels of concern.

Derek 519-318-0237

From:

Sent: Friday, October 12, 2012 1:15 PM

To: Dudek, Derek Subject: Hi again

Derek

By the map that is in the Exeter Times it looks like Next Era moved the transmission lines. If you have would it be possible to update me on where the lines are actually going? A map would be nice. The asked for this to see if it would impact on his farms. Also I have a map of the locations of the Windmills. Is this still valid?

As the Chair of the HMA I am getting questions all the time and just wish to stay up on what is happening

Thanks and have a great weekend.

From: Dudek, Derei

To:

Subject: RE: health concers

Date: Wednesday, October 17, 2012 1:26:00 PM

Hello

Please see below in bold, our response to the questions you've outlined.

Derek Dudek | Community Relations Consultant

NextEra Energy Canada, ULC 5500 North Service Road, Burlington, ON L7L 6W6 o:905.335.4904 x18 f:905.335.5731

mobile - 519.318.0237

derek.dudek@nexteraenergy.com

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From:

Sent: Tuesday, October 16, 2012 3:02 PM

To: SharedMailbox, GOSHEN-WIND

Subject: health concers

I have heard all the reports about health issues and was wondering if a study was to be completed prior to the turbine being set up. We have a few people in the area with health problems and they do not need any other health issues added to them.

NextEra Energy Resources takes concerns about human health very seriously and have participated in and opened our facilities to researchers to study such matters. Although much has been written about health effects associated with wind turbines, we have found no credible, scientifically peer-reviewed study that demonstrates a link between wind turbines and negative health effects when sited properly.

2nd concern – I have heard that visually impaired people that have a higher hearing capacity are very sensitive to the noise – in fact it may be hard on them. If this is so how will it affect the animals in the area like cattle and pigs or anyone with a hearing aid?

NextEra Energy operates over 8500 turbines in North America in a variety of different agricultural settings, and to our knowledge have not had issues with livestock health. In addition, we are subject to an approval by the Ministry of Environment to develop and operate our facility in accordance with strict noise guidelines. This will include post-construction monitoring of our site to ensure compliance.

Also how much will it reduce the property values, I have read of people who cannot even get a mortgage on home that are near turbines. Are you willing to compensate home owners that lose

value on the home that are surrounded by turbine when they go to sell them. If so will it be at Market values prior to the turbine being set up.

Most comprehensive studies we have reviewed to date including ones from Chatham-Kent, Central Illinois, and the multi-site study conducted by Berkeley Labs of the US Dept of Energy indicated that proximity to wind turbines do not have a negative impact in property values. The Central Illinois study found prices were negatively affected prior to the wind energy centre being built, but rebounded after it was in place.

I myself may have 5 in the 2 kl radius around my house.

From: Dudek, Derek

To:

Subject: Goshen - tundra swan information

Date: Tuesday, October 23, 2012 3:52:00 PM

Attachments: DRFT_NHA_Report_PartI.pdf.pdf



As per our phone call I've attached some excerpts related to tundra swans from the Natural Heritage Assessment. It's by no means comprehensive but includes the areas you were concerned about, as well as possible mitigaton measures for tundra swans. The entire report can be found at http://www.nexteraenergycanada.com/projects/goshen.shtml which includes everything in more comprehensive detail.

Please don't hesitate to contact me if you have any other questions or require more information.

Thanks,

Derek Dudek | Community Relations Consultant

NextEra Energy Canada, ULC 5500 North Service Road, Burlington, ON L7L 6W6 o:905.335.4904 x18 f:905.335.5731 mobile - 519.318.0237

derek.dudek@nexteraenergy.com.

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From:

Dudek, Derek

Tot

Goshen - turbine locations

Subject: Date:

Friday, December 07, 2012 10:13:00 AM

Hello

We were wondering if you would be able to discuss the research we've been conducting on your operations at the Grand Bend Aerodrome with respect to our Goshen Wind Energy Centre. We'd like to meet with you on January 9th or 10th sometime during the day. Would this work for you? If so, perhaps we could book a time and place convenient for you.

Thanks,

Derek Dudek | Community Relations Consultant

NextEra Energy Canada, ULC

390 Bay Street, Suite 1720 Toronto, ON M5H 2Y2

Canada

office: 416.364.9714 mobile: 519.318.0237

derek.dudek@nexteraenerev.com

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From: <u>Dudek, Derek</u>
To: <u>Geneau, Nicole</u>
Subject: FW: Goshen - site visit

Date: Monday, December 10, 2012 4:05:00 PM

From:

Sent: Monday, December 10, 2012 3:59 PM

To: Dudek, Derek

Subject: re: Goshen - site visit

Greetings

January 10 will work for me to meet with you at my home, late morning or afternoon will be fine. I assume you will be demonstrating with some technology how the IWT nearest to my home will impact us. That was the understanding I had with Nicole Geneau last May 29, in Exeter

Hello

You had requested a site visit from us earlier to discuss our noise and shadow flicker study results for our Goshen Wind Energy Centre project. We'd like to meet with you at your property on January 9th or 10th sometime during the day. Would this work for you? If so, perhaps we could book a time.

Derek Dudek | Community Relations Consultant

NextEra Energy Canada, ULC 390 Bay Street, Suite 1720 Toronto, ON M5H 2Y2

Canada

office: 416.364.9714 mobile: 519.318.0237

derek.dudek@nexteraenergy.com

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December 17, 2012



The purpose of this letter is to address some of the concerns outlined in your letter received by our office dated November 1, 2012. Note that your concerns will be submitted to the Ministry of the Environment as part of our overall consultation package of our Renewable Energy Approval application. However, we will also address your specific concerns here as well.

Prior to addressing your concerns, of importance is a clear understanding of our company. NextEra Energy Canada is a subsidiary of NextEra Energy Resources, LLC. We are the largest generator of wind energy in North America with 100 wind projects in 19 U.S. states and four provinces, with over 10,000 megawatts of generation. Since investing in our very first wind farm in 1989, NextEra Energy Resources has always been committed to the communities in which it operates. NextEra Energy Resources has always believed that fostering good relationships with local communities is paramount. We consider community outreach and providing complete information about our plans to be an important part of joining your community, and a key part of our corporate culture is to be a good neighbour. Our commitment is demonstrated every day by our behaviour as a company and as individuals.

Generally the concerns you expressed and our response are as follows:

1. Property Value Concerns

Multiple studies have found that changes to property values of homes are not caused by the existence of a wind facility in the area.

Excerpt from the Chatham-Kent property value study 2010:

"In the study area, where wind farms were clearly visible, there was no empirical evidence to indicate that rural residential properties realized lower sale prices than similar residential properties within the same area that were outside of the viewshed of a wind turbine. No statistical inference to demonstrate that wind farms negatively affect rural residential market values in Chatham-Kent was apparent in this analysis."

Excerpt from the Berkeley Lab property value study 2009:

"Specifically, neither the view of the wind facilities nor the distance of the home to those facilities is found to have any consistent, measurable, and statistically significant effect on home sale prices. Wind facilities have had no widespread and statistically identifiable impact on residential property values."

Copies of these reports can be found online at the following website locations.

http://www.canwea.ca/pdf/talkwind/PropertyValuesConsultingReportFebruary42010.pdf http://eetd.lbl.gov/ea/ems/re-pubs.html

I have also attached an executive summary of the Chatham Kent study reference above. I hope this information will alleviate some of your concerns.

Concerns over health impacts

NextEra Energy Resources takes concerns about human health very seriously and have participated in and opened our facilities to researchers to study such matters. Although much has been written about health

NextEra Energy Canada, ULC

effects associated with wind turbines, we have found no credible, scientifically peer-reviewed study that demonstrates a link between wind turbines and negative health effects when sited properly. NextEra will have a Complaint Resolution Process in place to address any concerns related to the project that may arise.

Our society confronts unprecedented challenges. Three of the most critical issues we face are the need for economic strength and vitality; the need to slow or reverse the effects of global climate change; and the need for affordable, reliable energy. The common thread in all three is energy. For nations and communities to thrive, we must have an affordable, reliable, clean supply of energy. There is a critical need for clean, renewable energy in Ontario to reduce our province's dependence on traditional forms of energy – such as coal – while boosting investment and creating local jobs.

3. Concerns over impacts to natural wildlife, particularly tundra swan migration

There is a significant amount of research and data that we have compiled over the past several years which is included in our Natural Heritage Assessment (NHA) Report, prepared by our consultants AECOM. This report outlines what impacts can be expected, and what initiatives NextEra Energy Canada will undertake to monitor and mitigate any negative impacts to wildlife. In particular, information on tundra swans has been extensive and includes observations given to us by the public. This includes the area identified as WSST-36 across the road from your residences which was identified as significant wildlife habitat. Below is an extract from Table 5.5 from the NHA which outlines the area in question and our plan for tundra swans.

Significant Wildlife Habitat	Potential Effects	Performance Objectives	Mitigation Measures	Likelihood and Significance of Residual Effects	Monitoring Plan ¹¹
Effects of Turbines	•		-		
Waterfowl (Tundra Swan) Stopover and Staging Habitats (WSST-15 and WSST-36) ¹²	Construction/ Decommissioning - Disruption of Tundra Swans in stopover and staging habitat due to construction/decommissioning activities.	Avoid disruption of Tundra Swans during migration,	 Constriction activities within 300 m of the stocover and staging habital should be timed to avoid Tunora Swan migration (typically early to late March). 	Disruption to Tundra Swan will be avoided by timing of construction activities. Negligible residual effects.	None required.
	 Possible indirect effects on stopover and staging napitat conditions through changes to surface water drainage patients. 	Minimize changes in surface water dramage patterns.	Minimpe land contour changes.	Habital damage avoided through maintaining surface water drainage putierms. Construction effects temporary and minor.	 Inspect locations following completion of construction to ensure no grade changes.
• As et tu	Operation • Avoidance by Tundra Swans of staging and stopover and staging habitat during migration due to proximity of turbines.	Minimize disturbance or disruption to Tundra Swan stopover and staging habitats.	Imprement contingency mitigation measures (as per consultation with MNR) or disturbance effects are detected through post-construction manitoring. Contingency Measures Temporary shut-down of select tastions during migration period if disturbine during migration period if disturbine effects are detected. If necessary, work with MNR to develop other appropriate mitigation measures.	Significance of residual effects will be determined based on the results of post- construction monitoring.	 Conduct 3 years of post- construction monitoring at Features WOST-15 and WISST-36 (as described in Evaluation of Significance, Section 4 of this report).

The NHA contains similar information on other specific species of concern you may have and can be found in full on our website at http://www.nexteraenergycanada.com/projects/goshen.shtml.

Please do not hesitate to contact me if you have any additional questions regarding the project. In addition, more information about our company or any of our projects can be found by visiting our website at www.NextraEnergyCanada.com.

Thank you,

Derek Dudek Community Relations

Cc: Nicole Geneau, Project Manager, NEEC Julia Cushing, AECOM

Attachments

EXECUTIVE SUMMARY

STUDY PURPOSE: Execute a market-based empirical study into the effect of wind

turbines on local residential real estate values. This study

focuses only on the Municipality of Chatham-Kent.

FUNCTION OF REPORT: Provide an independent, objective and reproducible analysis of

market evidence into the effect of wind turbines on real estate

values in the Municipality of Chatham-Kent.

BACKGROUND: Wind energy development has occurred in many countries

around the world for decades. While some real estate value studies have been undertaken, there have been a limited number executed in Canada. Most studies have their basis in subjective analysis, relying on anecdotal evidence and survey responses to form a basis for conclusions. This report considers only market based evidence, and applies a widely recognized and accepted approach to statistical evaluation of data sets in

order to evaluate the effect on real estate values.

Scope of Analysis: Due to the number of existing wind energy projects in the

Province of Ontario, it was necessary to select a study area

wherein:

there have been a sufficient volume of sales of properties that have taken place in close proximity to a wind farm

following its completion;

there have been a sufficient volume of sales of similar properties in the same general area but not in proximity to a

wind farm (beyond the viewshed); and

there is sufficient access to registry office sales records,

and local area real estate board listing information.

Wind Farm Study – Effect on Real Estate Values in the Municipality of Chatham-Kent, Ontario

STUDY AREA SELECTION:

The Chatham-Kent Region of Ontario was selected as a suitable study area as it met the primary selection criteria listed above, and a sufficient volume of property sale transactions for which MLS® and registry office details were available.

IMPACTS CONSIDERED:

Data was analyzed to determine the effect on real estate values as a result of proximity to wind turbines and, more specifically, on properties within the viewshed and those not within the viewshed of wind turbines. Some concerns expressed by those near proposed or existing wind farms include:

aesthetics; shadow flicker; and sound, audible and low frequency.

None of the above influences on price were measured independently. If there is an effect on real estate values from any or all of these influences, it will be measurable from market data. Recommendations for future studies are presented within the body of the report.

DATE OF INSPECTIONS:

The study area was visited on several occasions between May 18, 2009 and June 31, 2009 in order to view all properties within the viewshed as well as the control group of properties. This is known as a "ground-truthing" exercise.

EFFECTIVE TIME FRAME:

Primary research material was obtained during the month of May 2009, while additional data was obtained during the month of June 2009.

STUDY METHODOLOGY:

A Multiple Regression Analysis (MRA) statistical technique formed the basis for evaluating market data for this study. The MRA procedure is the most definitive tool to segregate data in a numerical format for further analysis and interpretation. Within the MRA framework data was divided into those characteristics that best explain the variance in selling prices of comparable real estate. The focus of this study is the measurement of the effect on real estate values due to the presence of wind farms; therefore, the data was further assigned a viewshed and a control group value.

MRA is used to determine the causal effect between variables by assigning a coefficient to each variable and determining its standard error as a function of sample size relative to population size. The "T score" is defined as the relationship between the coefficient of every variable and its respective standard error.

Data sampling did not return as large a volume of sale data as expected. Accordingly, other evaluation techniques were employed to aid in the evaluation of the data through improved matching of datasets. Within the report, Optimal and Coarsened Exact Matching (CEM) techniques were relied upon as additional data matching tools to further enhance the ability to analyze data by obtaining more closely matched pairs of data from the original dataset.

The study was not limited to MRA itself, nor was it limited to data filtering systems; rather, the study also explored the raw data that formed 14 pairs of identical property sales that were sold within and beyond the viewshed of a wind turbine. This is the more traditional approach to evaluating effects on real estate, and it was considered useful to compare merits of various options of data analysis available.

STUDY CONCLUSIONS

No statistical inference to demonstrate that wind farms negatively affect rural residential market values in Chatham-Kent was apparent in this analysis. Furthermore, this study did not find any consistent evidence from the analyzed data that such a negative correlation exists in the Municipality of Chatham-Kent. During the course of gathering data, there were no unusual quantities of rural residential properties listed for sale in the study area. Four unrelated data processes were used in studying the property sales information for Chatham-Kent. The only consistency was that each evaluation methodology found that it was highly unlikely that any type of a causal relationship exists between wind farms and the market values of rural residential real estate.

8 January 2013

TO: NextEra

RE: SET BACKS - Goshen Wind Project

The present trial and error method of assessing an adequate set back is a very flawed system. The residents of southwestern Ontario are being used as guinea pigs.

There is increasing research showing health problems of people living close to wind turbines (see attached research article). People living within 1.5 km may experience sleep disturbances which in turn can cause further health problems.

Research is showing that set backs should be 1.5 km to 2 km.

At this time, when we already have excess energy being produced in Ontario, I think it would be prudent to deal with the problems we have with existing wind farms and figure out how to fix these problems.

I have heard that in Europe, the set backs are 1.5 km. Perhaps this is why they are having fewer problems with wind turbines.

Please change setbacks to 1.5 km to protect the health of the innocent receptors.

Sincerely,



Adverse health effects of industrial wind turbines: a preliminary report Michael Nissenbaum MD1, Jeff Aramini PhD2, Chris Hanning MD3

- Northern Maine Medical Center, Fort Kent, Maine, USA, mnissenbaum@att.net
- Intelligent Health Solutions Inc., Fergus, Ontario, Canada, jeff.aramini@gmail.com
- University Hospitals of Leicester, Leicester, UK, chrisdhanning@tiscall.co.uk

INTRODUCTION

Guidelines and regulations for the siting of industrial wind turbines (IWT) close to human habitation are generally predicated on the need to protect the sleep of the residents. The recommended setback distances and "safe" external noise levels make the assumptions that IWT noise can be regarded as similar to other forms of environmental noise (traffic, rail and aircraft) and is masked by ambient noise. There has been no independent verification that these assumptions are justified and that the safeguards are sufficient to protect sleep.

Anecdotal complaints of annoyance and health effects from IWT noise have grown in number in recent years, not least because turbine size has increased and they have been placed closer to population centers. The predominant symptom of health complaints is sleep disturbance (Frey & Hadden 2007; Pierpont 2009; van den Berg et al. 2008; WindVOICe 2010). The consequences of sleep disturbance and the contribution of environmental noise are well documented (WHO 2009).

Complaints of adverse health effects were made shortly after IWT installations at Mars Hill and Vinalhaven, Maine, USA, began operating. A preliminary survey at Mars Hill, comparing those living within 1,400 m with a control group living 3,000-6,000 m away showed that sleep disturbance was the main health effect (Nissenbaum 2011, submitted for publication). A further study was therefore carried out at both Mars Hill and Vinalhaven using validated questionnaires and comparing those living within 1.5 km of the turbines with a control group living 3,500-6,000 m away.

METHODS

General study design

A questionnaire was offered to all residents meeting inclusion criteria living within 1.5 km of an IWT and to a random sample of residents meeting inclusion criteria living 3 to 7 km from an IWT between March and July of 2010. The protocol was reviewed and approved by IRB Services, Aurora, Ontario, Canada.

Questionnaire

The questionnaire comprised validated instruments relating to mental and physical health (SF-36v2) (QualityMetric Inc.), sleep disturbance (Pittsburgh Sleep Quality Index (PSQI) (Buysse et al. 1989) and the Epworth Sleepiness Scale (ESS) (Johns 1991), in addition to headache functional inquiry questions and a series of attitudinal questions relating specifically to changes with exposure to IWT noise. Only the results from the validated instruments are presented here.



Participant selection

The Mars Hill site is a linear arrangement of 28 General Electric 1.5 megawatt turbines, sited on a ridgeline. The Vinalhaven site is a cluster of three similar turbines, sited on a flat tree covered island. All residents living within 1.5 km of an IWT at each site were identified via tax maps, and approached either door to door or via telephone and asked to participate in the study. Homes were visited up to three times or until contact was made. Those below the age of 18 or with a diagnosed cognitive disorder were excluded. A random sample of households in a similar socioeconomic area 3 to 7 km away from IWTs at each site was chosen to participate in the study as a control group. Households were approached door-to-door until a similar number of participants were enrolled.

Data handling and validation

Questionnaire results were coded and entered into a spreadsheet (Microsoft Excel 2007). The distance from each participant's residence to the nearest IWT was measured using satellite maps. SF36-V2 responses were processed using QualityMetric Health Outcomes [™] Scoring Software 3.0 to generate Mental (MCS) and Physical (PCS) Component Scores. Missing values were verified and outliers were individually assessed. Data quality of the SF36-V2 responses was determined using QualityMetric Health Outcomes [™] Scoring Software 3.0. All SF36-V2 data quality indicators (completeness, response range, consistency, estimable scale scores, internal consistency, discriminant validity, and reliable scales) exceeded parameter norms.

Statistical analysis

All analyses were performed using SAS 9.22. Descriptive and multivariate analyses were performed to investigate the effect of the main independent variable of interest (distance to nearest IWT) on the various outcome measures.

Significance of binomial outcomes was assessed using either the GENMOD procedure with binomial distribution and logit link; or when cell frequencies were small (<5), Fisher's Exact Test. When assessing significance between variables with a simple score as the outcome (eg. 1-5), the exact Wilcoxson Score (Rank Sums) test was employed using the NPAR1WAY procedure. Significance of continuous outcome variables was assessed using the GENMOD procedure with normal distribution. When using the GENMOD procedure, age, gender and site were forced into the model as fixed effects. The potential effect of household clustering on statistical significance was accommodated by using the REPEATED statement.

Independent variables assessed included the following: Site (Mars Hill, Vinalhaven); Distance to IWT (both as a categorical and continuous variable); Age (continuous variable); Gender (categorical variable). Significance of Site as an effect modifier was assessed by fitting an interaction term (Site*distance).

Dependent variables assessed include the following: Epworth Sleepiness Scale (ESS), Pittsburgh Sleep Quality Index (PSQI), SF36-v2 Mental Component Score (MCS), SF36-v2 Physical Component Score (PCS).

For the purpose of interpreting statistical significance, the following were used: P-value < 0.05 = Significant; P-value 0.1 - 0.05 = Moderately significant; P-value > 0.1 = Not significant

Effect of Site on outcome parameters

The effect of Site was assessed by fitting Site (Mars Hill vs Vinalhaven) as a fixed effect, and as an interaction term with the main independent variable of interest (distance). Among all outcomes investigated, Site, and Site*Distance were not significant.

RESULTS

Study participants

33 and 32 adults were identified as living within 1,500 m of the nearest IWT at the Mars Hill (mean. 805 m, range 390-1,400) and Vinalhaven sites (mean 771 m range 375-1,000) respectively. 23 and 15 adults at the Mars Hill and Vinalhaven sites respectively completed questionnaires. Recruitment of control group participants continued to approximately the same number as study group participants, 25 and 16 for Mars Hill and Vinalhaven respectively.

There were no significant differences between the groups with respect to household size, age, or gender (Table 1).

Table 1: Demographic data

	Distance range from residence to nearest IWT (mean) in meters			
Parameter			3,300-5,000 (4,181)	5,300-6,600(5,800)
Sample size	18	20	14	27
Household clusters	11	12	10	23
Mean age	50	57	65	58
Male/Female	10/8	12/8	7/7	11/16

Sleep quality and health

The study group had worse sleep as evidenced by significantly higher mean PSQI and ESS scores and a greater number with PSQI >5 (Table 2). More subjects in the study group had ESS scores >10 but the difference did not reach statistical significance (p=0.1313).

The study group had worse mental health as evidenced by significantly higher mean mental component score of the SF36. There was no difference in the physical component scores.

Table 2: Sleep and mental health parameters

Parameter	Distance to IWT: Range (mean) m		p
	375-1,400 (792)	3,000-6,600 (5,248)	
PSQI Mean (LSmean)	7.8 (7.6)	6.0 (5.9)	0.0461
% PSQI >5	65.8	43.9	0.0745
ESS Mean (LSmean)	7.8 (7.9)	5.7 (5.7)	0.0322
% ESS >10	23.7	9.8	0.1313
SF36 MCS Mean (LSmean)	42.0 (42.1)	52.9 (52.6)	0.0021

ESS, PSQI and SF36 scores were modeled against distance from the nearest IWT using the equation: Score = In(distance) + gender + age + site [controlled for household clustering] and are shown in Figures 1-3. In all cases, there was a clear and significant relationship with the effect diminishing with increasing distance from the IWT.

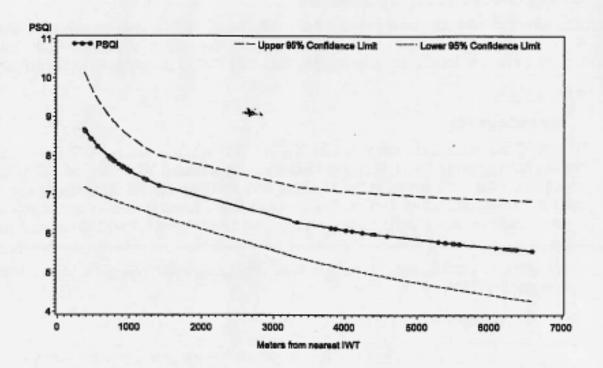


Figure 1: Modeled Pittsburgh Sleep Quality Index (PSQI) vs Distance (mean and 95 % confidence limits), p-value=0.0198

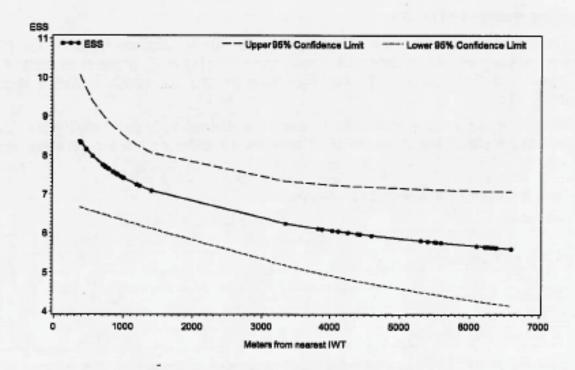


Figure 2: Modeled Epworth Sleepiness Scale (ESS) vs Distance (mean and 95 % confidence limits), p-value=0.0331

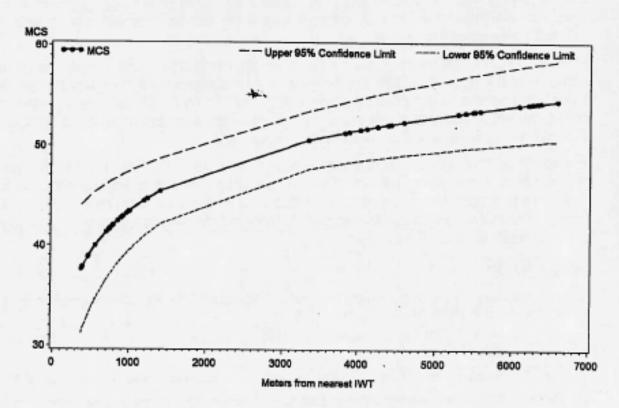


Figure 3: Modeled SF36 Mental Component Score (MCS) vs Distance (mean and 95 % confidence limits), p-value=0.0014

DISCUSSION

This study, which is the first controlled study of the effects of IWT noise on sleep and health, shows that those living within 1.4 km of IWT have suffered sleep disruption which is sufficiently severe as to affect their daytime functioning and mental health. Both the ESS and PSQI are averaged measures, i.e. they ask the subject to assess their daytime sleepiness and sleep quality respectively, over a period of several weeks leading up to the present. For the ESS to increase, sleep must have been shortened or fragmented to a sufficient degree on sufficient nights for normal compensatory mechanisms to have been overcome. The effects of sleep loss and daytime sleepiness on cognitive function, accident rate and mental health are well established (WHO 2009) and it must be concluded that at least some of the residents living near the Vinalhaven and Mars Hill IWT installations have suffered serious harm to their sleep and health.

The significant relationship between the symptoms and distance from the IWTs, the subjects' report that their symptoms followed the start of IWT operations, the congruence of the symptoms reported here with previous research and reports and the clear mechanism is strong evidence that IWT noise is the cause of the observed effects.

IWT noise has an impulsive character and is several times more annoying than other sources of noise for the same sound pressure level (Pedersen & Persson Waye 2004). It can prevent the onset of sleep and the return to sleep after a spontaneous or induced awakening. Road, rail and aircraft noise causes arousals, brief lightening of sleep which are not recalled. While not proven, it is highly likely that IWT noise will cause arousals

which may prove to be the major mechanism for sleep disruption. It is possible that the low frequency and infrasound components of IWT noise might contribute to the sleep disruption and health effects by other mechanisms but this remains to be determined and further research is needed.

Attitudes to IWT and visual impact have been shown to be factors in annoyance to IWT noise (Pedersen et al. 2009) but have not been demonstrated for sleep disturbance. Most respondents in the present study welcomed the IWT installations as offering economic benefits. The visual impact of IWT decreases with distance, as does the noise impact making separation of these factors impossible.

We conclude that IWT noise at these two sites disrupts the sleep and adversely affects the health of those living nearby. The current ordinances determining setback are inadequate to protect the residents and setbacks of less than 1.5 km must be regarded as unsafe. Further research is needed to determine a safe setback distance and to investigate the mechanisms of causation.

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http://www.healthywindwisconsin.com/Ontario%20Health%20Survey%20Abstract%20Results%20and%20Responses.pdf

Next Era Energy.

Comments:

Regardless of objections to the installation of wind turbines, it's going to happen anyway unless, of course, "divine providence" intervenes to prevent wind farm developments. Don't think that's likely though, do you?
 I abhor the monolithic monstrosities to be erected in the rural landscape of South Huron. It seems that the end justifies the means: wind energy by any means? What a

shame.

10th Jan 2013

Next En Everyy

January 12, 2013
Derek Dudek
Community Relations Consultant
5500 North Service Road, STE 205
Burlington, ON L7L 6W6

Dear Mr. Dudek,

I am concerned about the negative impact that this project will have on property owners in this area. Inparticular I understand that towers will be required to transmit the power to the users which are to the east. In other countries, in Western Europe large transmission towers are replaced by buried transmission lines. It would seem that this could be done here in light of a history of ice storms, higher maintenance costs, complaints about sight blight and transmission lines being hit by cars and truck knocking them over.

I would appreciate receiving data concerning long term cost studies for aerial vs. buried transmission lines. Furthermore I would also appreciate receiving calculations showing differences in cost when windmills are located closer to the end use consumer. It would seem logical that even if there was less wind at the end use consumer location when considerations concerning voltage loss with transmission cost of transmission line construction and transformer stations there may not be any cost savings.

I attended the meeting in Zurich on Thursday January 10, 2013 and discovered that there had never been negotiations between Goshen Wind Energy and Hydro One concerning use of their high voltage already existing lines in the area. It would seem that there may be a political reason for this and this may be unfair to tax payers, property owner in the province. I would expect that co-operation should exist to eliminate environmental damage and costs in projects such as this.

STREET, STREET



January 21, 2013



Dear Sirs:

The purpose of this letter is to address some of the concerns outlined in your letter received by our office dated January 12, 2013. Your concerns were centred upon the Goshen Wind Energy Centre's 115kV transmission line, namely the cost of its development and desire to see it built underground.

Firstly, while difficult to argue that underground infrastructure would have less of a visual impact, the proposed overhead poles are not significantly different then existing Hydro One distribution poles seen along the roadsides of South Huron currently. The proposed poles are single poles that can be spaced up to 300' apart. They are not the lattice structures associated with Hydro One's existing transmission lines in the area.

While there would be cost savings to our company had no transmission line been required for the Goshen project, it does not impact the cost to the ratepayer, as there is no difference in cost associated with the Feed-in-Tariffs awarded to renewable energy projects. In addition, the length of our transmission line (approx. 23km) is not significant enough to factor in large line losses that would otherwise make the project unviable. Indeed there are many high voltage transmission lines of greater length in southern Ontario.

Without providing specific values, the cost of burying a high voltage transmission line could cost 10x as much as an overhead transmission line. Cost is dependent on many factors, such as the following:

- Existing Surface conditions (Roadways, buildings, structures, canals or other features, available easements)
- Existing Sub-Surface conditions (Infrastructure such as sewer, gas, water, and electric distribution; Remnant foundations and structures, geological formations; Regional water table levels)
- Transmission Conductor design, equipment, infrastructure and construction (Specialty conductor cabling and coupling mechanisms; Concrete vaults for isolation of conductor cabling; Laterally spaced access portals and monitoring equipment)

Please do not hesitate to contact me if you have any additional questions regarding the project. In addition, more information about our company or any of our projects can be found by visiting our website at www.NextraEnergyCanada.com.

Thank you,

Derek Dudek

Community Relations

Cc: Nicole Geneau, Project Manager, NEEC

Julia Cushing, AECOM