

Appendix A9. Additional Public Comments

From: BIRD, THOMAS [mailto:THOMAS.BIRD@nexteraenergy.com] Sent: Thursday, June 10, 2010 8:34 AM

# Subject: RE:

I'm sorry for the delay in responding to your inquiry. I am very interested in finding out more about your airfield and its proximity to our proposed project. Can you tell me where it's located? If needed, I would be happy to meet with you to discuss this in person. We are having open house meetings at the end of June on the 28th, 29th, and 30th. Would it be possible to meet earlier in the day before one of those events? Thank you,

Tom Bird | Environmental Services Project Manager NextEra Energy Canada, ULC 5500 North Service Road, Suite 205, Burlington, ON L7L 6W6 905.335.4904 x15 thomas.bird@nexteraenergy.com

Please consider the environment before printing this e-mail. Thank you

Sent: Monday, May 31, 2010 1:18 PM To: SharedMailbox, BLUEWATER-WIND Subject:

To: Tom Bird

Hello Tom

I have some concerns about the wind energy project proposed for Bluewater. I own and operate a Private Airstrip that appears to be inside the project zone. I would appreciate discussing any potential negative impacts there may be on the continued safe operation of my facility.



From: GENEAU, NICOLE [mailto:NICOLE.GENEAU@nexteraenergy.com] Sent: Friday, July 09, 2010 11:36 AM To Cc: Hernandez, Joselen; BIRD, THOMAS; Shute, Jeremy Subject: RE: Questions presented at June 28 Zurich Meeting Importance: High

#### Dear

It was a pleasure meeting you at the Bluewater Wind Energy Centre Open House in Zurich on the 28th of June. I enjoyed our conversation.

I just wanted to acknowledge that we received your questions in writing and will provide a formal written response by end of day July 16th, 2010.

The summertime is always a challenge to coordinate schedules with holidays and vacations. We appreciate your patience and look forward to meeting with you in person again soon.

Best regards,

Nicole

Nicole Geneau Project Manager | NextEra Energy Canada, ULC



 905.335.4904 x.12 (o)
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 nicole.geneau@nexteraenergy.com

 5500 North Service Road, Suite 205
 Burlington, ON L7L 6W6
 Canada

Sent: Monday, June 28, 2010 8:53 PM To: GENEAU, NICOLE Subject: Questions presented at June 28 Zurich Meeting

Hi Nicole! Please find attached the list of questions which I gave to you in Zurich - as you requested.

# <u>Questions to Ask at the Public Open House on the Proposed Bluewater, Goshen, and Jericho</u> <u>Wind Power Project June 28-30, 2010</u>

These questions are asked by a lon behalf of the Bluewater Shoreline Residents' Association.

1. What attempts will you make to minimize the noise of a) the turbines and b) the transformers?

2. What will be the size of the turbines and from what country will you purchase them?

3. Will you abide by the set-backs established in the Bluewater By-law (passed in 2009)?

4. How do you respond to the McMurtry statement and some European proposals that the minimum setback from all points of reception should be at least 2.0 or 2.5 kilometers?

5. To what extent will the transmission lines be buried? At what cost?

6. Will the leases signed with the land-owners require them to agree to (a) right of first refusal (b) assumption of liabilities (c) silence on these issues?

7. What plans do you have for dealing with people who find they have to leave their nearby homes because the sound and vibration annoyance of the turbines affects their health or their ability to sleep at night? (This is happening in many locations in Ontario, the USA and around the world.

8. Are you aware that the settlement area along the lakeshore in Bluewater is made up of more than 1300 residences of which more than 25% are year-round homes?

9. Since the affected area is on a major migration route, what are the results of your studies on migrating birds and bats?

10. What is the lowest price per kWh at which the wind farms could be profitable?

11. Your website says that you sponsor local events. What local events are you planning for Bluewater? What ongoing attempts will the corporation make to stay in touch with the local people who will be affected by the wind farms?

12. What can be done to mitigate the long term negative effect on property values in the agricultural, the lakeshore residential, and the village areas near the wind farms?



To: To: Shute, Jeremy; BIRD, THOMAS; Hernandez, Joselen Subject: Responses to your questions

Hello

Attached please find responses to your questions posed in writing at the June 28th Open House for the Bluewater Wind Energy Centre.

We appreciate your engagement in this process and look forward to speaking with you again.

Best regards,

Nicole

Nicole Geneau

Project Manager | NextEra Energy Canada, ULC



5500 North Service Road, Suite 205 | Burlington, ON L7L 6W6 | Canada 905.335.4904 x.12 (*o*) | 905.335.5731 (*f*) | 647.274.8026 (*c*) nicole.geneau@nexteraenergy.com

#### <u>Questions to Ask at the Public Open House on the Proposed Bluewater, Goshen, and Jericho</u> Wind Power Project June 28-30, 2010

These questions are asked by Association.

on behalf of the Bluewater Shoreline Residents'

1. What attempts will you make to minimize the noise of a) the turbines and b) the transformers?

NextEra Energy takes two primary steps to assure minimal sound impact on neighbours. First, each wind turbine manufacturer warranties that sound levels from its turbines will fall below set sound level restrictions so as to minimize sound reaching adjacent homes. Second, sound from a wind turbine diminishes over distance, and therefore NextEra Energy exercises great care to maintain adequate separation distance between wind turbines and homes. The Ontario government requires a minimum setback of 550m between a wind turbine and a residence that is not part of the project. NextEra Energy will ensure it meets, or in most cases, exceeds this requirement.

The Ontario Ministry of Environment's Noise Guidelines for Wind Farms establishes maximum permissible sound levels at residences of 40 decibels. This applies to both wind turbines and the substation transformer. These guidelines are consistent with the standards set forth by the United States Environmental Protection Agency and even lower than the thresholds for annoyance as recommended by the World Health Organization's report on community noise. For purposes of comparison, sound levels at or below 45 decibels are consistent with sound levels inside a typical home or residence, and far quieter than sound within the confines of a small office or even speech at a distance of 10 feet.

2. What will be the size of the turbines and from what country will you purchase them?

The turbines we are proposing to use in this project are about 80 meters tall – but they are also relatively slim. Generally each tower base is 8 meters across, and each turbine spaced at least 250 meters apart. Rows of turbines are set at least 1/2 kilometer apart, allowing for substantial space in between each tall, thin tower. In general, the entire wind farm, including towers, substation, and access roads, use about 5 percent of the allotted land. In rural settings, agricultural activities, such as farming and grazing, continue undisturbed on property where wind turbines are located.

NextEra Energy purchases state-of-the-art turbine technology from reputable manufacturers including GE and Siemens. Decisions about where components of turbines are sourced are made by the manufacturer, not by NextEra Energy. However, we will comply with all Domestic Content requirements for our wind projects. By 2012, a wind project will need to achieve 50 out of 100 points on the Domestic Content grid published by the Ontario Power Authority. A link to that grid is provided below. We are actively working with our suppliers to develop plans that will ensure we satisfy these requirements.

http://fit.powerauthority.on.ca/Page.asp?PageID=122&ContentID=10598&SiteNodeID=105 4&BL ExpandID=262

3. Will you abide by the set-backs established in the Bluewater By-law (passed in 2009)?

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The Green Energy and Economy Act set out explicit setbacks that must be used to site all wind projects under the Renewable Energy Approval process and O.Reg. 359/09 established by the Ministry of Environment. These setback requirements supersede all previous municipal zoning by-laws relating to renewable energy. NextEra Energy Canada will meet, or exceed, the regulations set out in that legislation.

NextEra Energy Canada was actively involved in the process of development of the Bluewater By-Law. We closely followed the discussion and will consider these in our siting process.

4. How do you respond to the McMurtry statement and some European proposals that the minimum setback from all points of reception should be at least 2.0 or 2.5 kilometers?

The Government of Ontario regulates the setbacks for wind turbines and has determined that a minimum 550m setback is appropriate to protect public safety. As mentioned above, the actual setback distance is determined by compliance with sound level thresholds which often result in a setback of greater than 550m. We believe you are referring to a 2006 report from the French National Academy of Medicine which recommended that turbines over 2.5MW be sited at least 1.5km from the nearest residence. However, the French Ministries of Environment and Health reviewed this recommendation and conducted a follow up study that recommended modelling the sound impact of the project on a case-by-case basis rather than defining a fixed distance between wind farm sites and residential areas.

5. To what extent will the transmission lines be buried? At what cost?

It is our preference to bury collection lines, however, it is too early in our development process for these wind projects for us to comment on the collection system or of the facilities.

6. Will the leases signed with the land-owners require them to agree to (a) right of first refusal (b) assumption of liabilities (c) silence on these issues?

As per our discussion on June 28<sup>th</sup>, NextEra Energy Canada enters into easement agreements with landowners regarding all infrastructure related to our wind facilities. These are sensitive commercial agreements that we have refined over the last 20 years of doing business in the wind industry. The language in our 'option' and 'easement' agreements is valuable and this is the reason it is confidential. Landowners are given the opportunity to have the agreement reviewed by legal counsel of their choice prior to execution.

NextEra Energy Canada is solely responsible for anything related to the wind facility from a liability perspective including property taxes for the area of land occupied by our turbines, roads and collection system. Our responsibility is clearly described in our agreement with the landowner.

Regarding a 'right of first refusal', we would need clarification regarding the question before an answer can be provided. We are unable to determine what you are referring to.

7. What plans do you have for dealing with people who find they have to leave their nearby homes because the sound and vibration annoyance of the turbines affects their health or their ability to sleep at night? (This is happening in many locations in Ontario, the USA and around the world.

At NextEra Energy, we take any concerns related to our projects seriously. Much has been written about health effects and potential property value impact associated with wind turbines. We are not aware of any scientifically peer-reviewed information demonstrating a link between wind turbines and negative health effects, nor are we aware of any studies suggesting a negative impact to property values from wind turbines. New studies conducted on these two issues add to the body of evidence that neither of these concerns is founded.

In 2009, a scientific advisory panel was commissioned by the American and Canadian Wind Energy Associations to review currently available literature on perceived health effects of wind turbines.

The panel's top findings include:

• The sounds emitted by wind turbines are not unique. There is no reason to believe, based on the levels and frequencies of the sounds, that they could plausibly have direct adverse physiological effects.

• If sound levels from wind turbines were harmful, it would be impossible to live in a city given the sound levels normally present in urban environments.

• Sub-audible, low frequency sound and infrasound from wind turbines do not present a risk to human health.

• Some people may be annoyed at the presence of sound from wind turbines. Annoyance is not a pathological entity.

The turbines used by NextEra Energy Resources and NextEra Energy Canada feature "quietness warranties", assuring that sound levels will not exceed certain per-determined levels, and our wind farms are designed accordingly to assure that sound levels reaching residences do not reach levels that might be a cause for concern.

The design and operations plans for our wind facilities in Ontario will be made public during the Renewable Energy Approval process. These plans will include protocols for how any reports related to our facilities will be addressed. If someone has a concern, there will be a clear method for them to contact us, share their concern and have us respond.

8. Are you aware that the settlement area along the lakeshore in Bluewater is made up of more than 1300 residences of which more than 25% are year-round homes?

Yes. NextEra Energy Canada, along with <u>Canadian Green Power (our partner on the</u> <u>Bluewater, Goshen and Jericho projects)</u>, has been active in Huron and Lambton Counties for the last 4 years.

9. Since the affected area is on a major migration route, what are the results of your studies on migrating birds and bats?

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Our avian and bat studies are currently underway. When completed late this fall, we will have conducted winter bird surveys, spring migratory bird surveys, breeding bird surveys, and fall migratory bird surveys. The purpose of the surveys is to understand the species present and areas of activity so we can minimize any potential interference by our wind farm operations. Similarly, we are currently conducting a bat monitoring program. The results of our surveys will be available for public review for 60 days before our next open house meeting. As part of our Renewable Energy Approval application, the Ministry of Natural Resources will be reviewing our studies to ensure they meet with their approval. The avian and bat surveys are carried out and reported on by experts in their fields.

Wind sites have a low impact on birds. In the U.S. it is estimated that wind turbines nationwide account for about 30,000 bird fatalities a year. Birds face a much higher degree of risk from other sources:

- Buildings and windows -- up to 980 million
- House cats -- up to 100 million
- Vehicles -- up to 80 million
- Pesticides -- up to 67 million
- Communication towers -- up to 50 million

(Source: National Wind Coordinating Committee and Western Ecosystems Technology Inc.)

In our commitment to wildlife protection, we have:

- Established technical review committees to monitor and address avian issues
- Implemented post-construction studies to gather more information on the effects of wind on wildlife
- Become a funding member of the Bat and Wind Energy Cooperative (BWEC). Others in this group include the American Wind Energy Association, Bat Conservation International, the Department of Energy National Renewable Energy Laboratory and the U.S. Fish and Wildlife Service. The goal of this collaborative effort is to study impacts of wind turbines on bat species.

10. What is the lowest price per kWh at which the wind farms could be profitable?

The commercial success of a wind project depends on many variables including the strength of the wind resource, the cost of the equipment and commodities in general and the revenue received for the electricity generation. Given the wide range of possible configurations of a wind farm including size, technology and location, it is impossible to provide a blanket answer to this question.

Recent procurement initiatives for wind energy in <u>provincial jurisdictions across</u> Canada have resulted in price ranges from \$0.10/kWh to \$0.15/kWh, depending on whether payment for the environmental attributes are included in the energy price.

11. Your website says that you sponsor local events. What local events are you planning for Bluewater? What ongoing attempts will the corporation make to stay in touch with the local people who will be affected by the wind farms?

NextEra Energy Canada is committed to being involved in the communities in which our facilities are located. After all, our employees live and work there. It's important to them, and our company, that we are good <u>neighbours</u>. From project development through operations, we engage landowners, <u>local residents</u>, community leaders and businesses.

Once the wind energy centre is operational, we will publish a phone number to the Operations and Maintenance Center and ensure the local landowners and <u>neighbours</u> have this contact information.

We have supported the annual Autumn Indulgence fundraiser for the Grand Bend Rotary Club for the last several years and welcome other opportunities to engage with local communities as our investment and presence in the area solidifies.

12. What can be done to mitigate the long term negative effect on property values in the agricultural, the lakeshore residential, and the village areas near the wind farms?

We have universally found that our wind farms have a positive impact on the future economic development of an area, increasing the economic base of the community through additional tax revenue, new construction jobs and full-time permanent jobs once the plant is operational. Income to local businesses, including motels, caterers, office supply companies, construction firms, rental companies and others, also add to the economic development of the local area. Furthermore, wind farms increase the economic return on agricultural operations in the area, preserving traditional land use,

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### Replies to the NextEra Responses to the Numbered BSRA Questions of June 28

(Prepared by for the Bluewater Shoreline Residents' Association – September 2010)

1. <u>Noise</u>: We are very concerned that the Ontario Ministry of the Environment's Noise Guidelines for Farms are inadequate and unenforceable. Low frequency noise is potentially a serious problem and is still being studied. Satisfactory epidemiological studies on health effects have not been completed. In essence, we are still dealing with an unknown here. The MOE has not developed an appropriate protocol for measuring noise. Setback distances are being increased in many jurisdictions. Our request is that NextEra abides by a setback distance of 2 km from all settlement areas and 2 kilometers east of highway 21.

2. <u>Employment Opportunities in Ontario</u>: It is our understanding that wind energy will create very few permanent jobs in Ontario. How many long-term permanent jobs will be created locally by the proposed Bluewater, Goshen, and Jericho Projects?

3. <u>Setbacks</u>: Specifically, what do you mean when you say "we will consider these in our siting process".

4. <u>Setbacks</u>: We have been told that requirements for setback distances from the United Nations and also other countries are much greater than 550 meters. We have also been told that the concentration of industrial turbines planned in Ontario is much greater than in most European countries and American states. It is quite clear that the agricultural areas of southern Ontario are more densely populated than in most countries where large numbers of industrial turbines are located.

6. <u>Right of First Refusal, Liabilities, and Silence on the Issues</u>: We have been told that the leases being signed by some farmers include the provision that the Energy Company, in future, would have the right of first refusal on the sale of the farmland where the industrial turbines are located. We have also been told that liabilities which arise through the malfunction or breakdown of these turbines will fall back to the property owner rather than to the Energy Company. Further, we have been told that each landowner who signs a lease with the Energy Company is required to maintain silence about the terms of the lease. To what extent are these things true or false?

7. <u>"Annoyance" and "Health":</u> In our view the following statement which you make in the second paragraph of response # 7 reveals a sad lack of concern and a significant degree of arrogance.

• "Annoyance is not a pathological entity".

The reality is that many people living close to turbines in Ontario and elsewhere have had to move out of their homes or have had to stay behind and suffer from headaches, inner ear problems, and sleeplessness. A common sense concept of "health" includes these physical problems. To argue that some people suffer ill effects and other people do not is simply unsatisfactory.

This is one of the strongest reasons we believe that setback distances need to be greater.

12. <u>Property values</u>: We have studies showing that residential property values are negatively affected by the proximity of industrial turbines. We have concerns that village and town property values will decline in the areas where the turbines are located.

<u>Additional Items</u>: In the three months since your June 28 meeting, many other issues related to the projects have arisen locally. These include the following: impact on wildlife, economic costs, electricity pricing, backup electricity generation, impact on wildlife, use of agricultural land, effects of industrialization on rural life.

#### Bluewater Shoreline Residents Association (BSRA)/ NextEra meeting

Attendees: Tom Bird (NextEra - Project Manager, Environmental Services), Josie Hernandez (NextEra -Media Relations), I (BSRA – President), (BSRA – Treasurer), (BSRA – Treasurer), (BSRA – Past President), Jeremy Shute (AECOM – REA consultant to NextEra).

- A meeting agenda was outlined and agreed upon
  - Sit down meeting to focus on responses to follow-up questions initially posed by the BSRA and sent to NextEra

September 29, 2010

- o Tour of the local area by car
- There was general discussion about the new provincial permitting process and changes from previous processes
- NextEra does not have a contract for the project at this point. The contract process was described. NextEra will probably know by the end of summer 2011in if a contract for the project has been awarded.
- The REA (Renewable Energy Approvals) process for NextEra's projects will be continuing for a while. There will be more opportunities to continue this discussion.
- Question #2 [from follow-up question document] discussion about noise
  - 2 km set back from Lake Huron (or from Highway 21?) was initially recommended by Bluewater Council
  - o BSRA would like NextEra to respect that same setback request
  - o Discussion of the current provincial established 550 m setback
  - BSRA would like setback distances to be measured from settlement areas concentrations of people rather than single houses
  - Where did 2 km setback come from?
    - Comes from a French recommendation that suggestions 2 km
    - Follow up studies were done in France and set back process was changed from a distance based to sound based set back
  - The personal experience of people in the area and as reported in the local media suggests that 2 km is a good set back distance
  - A 2 km from the water is the starting point that BSRA residents would be comfortable with
  - The BSRA comprises about 1300 properties, 3500 people in a 21 km swath east of Highway 21 north of Grand Bend. A map of the BSRA communities was shared.
     writes a newsletter for BSRA.
  - The BSRA has been hearing from the community:
    - An "uproar" about distance and setbacks
    - That the mood is changing locally among farmers
    - Offshore wind proposals are of great concern

- The Province does not prescribe setbacks to settlements (concentrations of people), but to individual homes
  - NextEra has observed a voluntary set back from the lakeshore for ecological reasons and because of the human activity along water
- On NextEra's project maps, the Bluewater project is further from water than is the Goshen project
  - Accordingly, people adjacent to the Goshen project area are more concerned about the setback distance
- $\circ$   $\;$  There was discussion about the nature of a study area and how it was determined
- o BSRA shared a map of wind development constraints developed by County Planning
- The constraint process NextEra is undertaking seems quite similar with setbacks from wetlands, woodlots, commercial towers, houses and roads
- o Are turbines going to affect wireless internet?
  - there are communication-based regulations that NextEra must follow that address wireless internet services
  - Tucker-Smith and Hay Communications are the local internet service providers
  - Tom Bird is going to contact them
- Does the company go back to survey communities on their views/concerns after a project is completed?
  - o Official surveys are not completed
    - It is important for NextEra to know if issues are developing locally both good and bad - so that they can be addressed.
    - NextEra typically established a local office and through this office has people active in the community. This provides an opportunity to get unofficial feedback from the community.
    - Local people are constantly in communication with company through ongoing maintenance and operations staff. This provides NextEra with an opportunity to determine if there are issues of concern in the community.
- BSRA would like to see money generated from the projects going back into community
- BSRA would like the local ecology and environment to be maintained as it is
- There was a general discussion about rising energy costs and the BSRA's concern that coal-fired generating plants are not going to be shut down due to the generation of wind power.
  - The book "Power Hungry: The Myths of "Green" Energy and the Real Fuels of the Future" by Robert Bryce describes these concerns in detail.
- It would helpful for NextEra to receive scientific reports or studies that document, describe and analyze the types of concerns people have. NextEra is often in the position of discussing reports that are being described second-hand without the benefit of seeing the original studies.
- Property taxes are very high locally along Lake Huron
  - There are concerns that properties will be devalued because of wind energy development

- People concerned about being able to sell their properties there is a lot of money tied up in property
- There is a danger of stories about property values decreasing and health effects, whether they are true or not, affecting peoples perspectives and becoming a selffulfilling prophecies
- Question #6 [from follow-up question document] discussion about leases
  - o Lease questions are mostly of interest to people inland, not along the lake
  - Because leases are confidential, the general public is not sure what is in them and is worried about what they contain
    - One issue that has been raised is that wind companies have the first right of refusal on sale of the farms where they have leases. This has led to concern that people will be losing their farm land to wind energy corporations over time and that these corporations will end up owning huge agricultural areas throughout the area
    - NextEra is not in the farming business, and is not interested in buying and owning farm land. They do not have a right of first refusal for the sale of farms in their leases.
  - Another concern that has been raised by area community organizations is about whether liability for potential problems relate to property owner or to the wind energy company
    - NextEra is responsible for liabilities associated with their turbines
    - NextEra provides funding for land owners (leaseholders) to take the leases to their own lawyers
  - What happens if a turbine doesn't produce as much as it is supposed to?
    - NextEra will try to fix any problems with a turbine if one emerges
    - Projects are measured as a whole at the point where they connect to the grid
    - Wind modeling is done in advance of project design to determine if the project is viable
  - $\circ$   $\;$  The question of rated capacity vs. real production was raised
    - Capacity concerns may be based on a misnomer. NextEra does not base predicted production solely on the name plate capacity, but on a set of factors, including experience from other projects.
  - Some discussion about the time of maximum energy production
    - It may be between 9 PM 2 AM
    - NextEra will receive an overall price per kW, which is not based on time of day
      of production
  - Some members of the BSRA have come to the position that the net effect from producing power by wind will have no affect on global warming
  - There will be a mix of energy sources in the future energy supply in Ontario, wind energy will be a part of this mix
  - The suggestions was made that wind is here to stay, let's work together and continue to talk about it

- Question #7 [from follow-up question document] discussion about health
  - o BSRA has heard of people being annoyed so much that they are getting health effects
  - A concern was expressed that the definition of health in wind energy sector's health reports is dismissive of people's real concerns. BSRA took exception to the phrase "Annoyance is not a pathological entity"
  - NextEra will not dismiss people's concerns. NextEra going to be here for a long time if project goes ahead. Although NextEra does not have any operating wind energy centres in Ontario, they do have extensive experience with wind energy centres across the US. The Ontario regulations are much newer than NextEra's experience.
- A note of clarification the Bluewater Municipal Bylaw ended up at with setbacks at 1 km east of Highway 21
- Question #2 [from follow-up question document] employment opportunities
  - Concern that there will be very few local permanent jobs
  - o Estimate of 4-6 jobs / project
  - The permanent jobs may require some specialized skills
    - Facility management, technical, maintenance
  - Tom Bird is going to find out about what specific qualifications will be called for and will share that information with the BSRA
  - NextEra is working with technical schools in Texas to prepare graduates for employment in the industry
    - This may start happening at local colleges in Ontario as the wind energy industry develops
- Are there other areas where NextEra has wind facilities where there are similar habitation patterns, with dense 80/100 acres parcels?
  - There are unique aspects of the Ontario landscape.
  - Josie Hernandez will look into the land use patterns in American states where NextEra is currently operating and will follow up with the BSRA
  - It was suggested that the NextEra website might have information on other project areas
- It was reported that no more land based turbines are going to be erected in Denmark
  - The Danish wind model is being shut down
  - An article from the National Post was discussed "Danes bow to wind power blowback"
     by Andrew Gilligan
- There was discussion about the turbine layout for the Bluewater, Goshen and Jericho wind energy centres
  - A layout has not been developed at this point
    - Constraints mapping is being prepared currently, then models will be run to determine turbine locations
  - Usually the maximum number of turbines is stated in a project description and then they work backwards once the constraints have been identified
  - Likely going to be fewer turbines then originally proposed

- There was a discussion of Tundra Swans and migration routes
  - One can hear the swans, all the way to the Cedarbank subdivision, when they stop in this area in the spring time
  - They travel up the lakeshore and then across the lake about between the 3<sup>rd</sup> week of March and the 3<sup>rd</sup> week of April
  - They end up in Lake Winnipeg and then go on to the arctic, starting in Chesapeake Bay
  - There are also millions of ducks and monarch butterflies that migrate along this route
    - son is an ornithologist and has studied that flight path
  - NextEra has a company doing bird studies the report should be complete in late November
  - Reports will be finalized in January.
  - Tom Bird will send BSRA a copy of the report when it is complete
  - NextEra's consultants will be meeting with representatives from the Lake Smith Marsh Project to learn more about the tundra swan migration
- BSRA was appreciative that NextEra participated in the meeting. Although they are not happy about the project they appreciate the opportunity to discuss their point of view and talk about their concerns. People's hearts and investments are here and they are concerned about the local environment.
  - BSRA 54 subdivisions
  - Each has a local organization
  - Roads maintained locally and paid for by members
  - The 54 groups have formed a federation-umbrella the BSRA
    - 8 person board elected annually
    - was on board for 6 years and is stepping back
    - is now the President, is treasurer
  - Water quality, sewage and taxes are big issues
  - A BSRA members goes to all local council meetings
- NextEra was also appreciative of the opportunity to have good dialogue about their wind energy projects and hopes to continue discussions with the BSRA
- There was some discussion about what other local groups or people NextEra should meet with

After the formal meeting, all participants except Lynn Lindsay did a tour of the area. The local environment and geography was discussed. Several local subdivisions were visisted.

Follow up items:

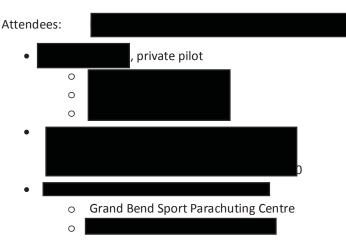
Tom Bird is going to contact the local internet service providers

Tom Bird is going to find out about what specific qualifications will be called for [for permanent jobs] and will share that information with the BSRA

Josie Hernandez will look into the land use patterns in states where NextEra is currently operating and will follow up with the BSRA

Tom Bird will send BSRA a copy of the report [avian study] when it is complete

#### **Grand Bend Aerodrome meeting**



- 2 ½ ° slope is needed for takeoff and landing
- With new parachuting students there is always a possibility for radar failure or change in wind
   Never had anyone past 1.5 mile radius
- 2 mile radius would minimum needed for a buffer
- 2.5 to 3 mile radius would be a lot better approach pattern is a rectangle not a straight approach
- 1000 feet is typical circuit heights for an approaching plan within the 3 mile planes can fly as low as 500 feet; Aircraft are about 500 feet high on final approach
- ٠
- Need to have lights on the turbines
- Over open country you can go as low as 500 feet
- Are there turbulence issues associated with turbines?
- - o 20-25 planes
  - o Minimum 150 feet above height of blades
  - o One guy IFR rated
    - Can fly in clouds with computer assisted navigation
  - o Meetings once a month
- Another private airstrip in Bluewater project
  - Flying farmers have a book out with their members locations
- If there are issues it would be for people flying in from outside the area
  - o This airport is listed in the supplement
  - o Neighbours of a farmer with a turbine won't be a problem

September 30 2010

- Canada Flight Supplement. Nav. Canada
  - Updates monthly
  - o Shows obstacles in area
  - May need to send turbine locations to Nav Canada
- Nav Canada VFR Navigation chart
  - Maps = now beginning to show warnings of where there are turbines
- 2 eagles were seen near the aerodrome this spring
  - High ridge near Parkhill could be good for turbines
  - o Birds/swans an issue in the spring
- Used to be, and still may be, an airstrip near Forest
- There is a small grass strip near Port Franks Road. Peter Bastiansen.

Lambton Heritage Museum/Lake Smith Conservationists Meeting

September 30, 2010



- The Lake Smith area is an international IBA (Important Bird Area)
- Lake Smith Marsh Project
  - o Drained in 1955

.

- Run by a group of local naturalists
  - There are actually two groups: Lake Smith Conservationists and the Lake Smith Marsh Community Conservation Association
  - Lake Smith Conservationists
    - is the publicity director
      - president
  - Sponsor the Lake Smith Marsh Community Conservation Association
    - Formed by the farmers who farm in and beyond the old lake
  - o Temporal location associated with fly-wing
  - Changing corn agricultural patterns has affected swan resting patterns as the swans eat corn
    - As corn is planted further north birds migration change and spread out location
    - Birds need water for nocturnal protection
    - Resting locations depend on water levels and other variables
  - o 17000 swans was peak
  - Two averages given 2-6000 swans/year and 10,000 15,000 swans/year
  - As a councillor, which is not hearing anything about the proposed wind energy centres during his campaigning and is not hearing anything from his group
  - o He is a wind advocate as long as the location are sensible
  - He represents a rural ward in Jericho
    - Not getting any feedback from farmers
    - No negativity from door to door meetings
  - On thing he has heard is that there are two stories out there two different companies with different lease payments
  - o Swans fly about 10 stories high when they are nearing their resting area

- o There is a swan watch website <u>www.Returnoftheswans.com</u>
- The swans congregate in fields from Kettle Point up towards Grand Bend; 4-6 miles inland from Lake Huron
- o Spread out along this shoreline area into ponds and corn fields
- From Sarnia up to Huron Bruce about 25,000 swans
- The Pinery has a 25 year record and stats



#### Goderich Aircraft Meeting

September 30, 2010

Attendees: Goderich Aircraft, Vince Deschamps, Jeremy Shute



- Wants to make sure we are looking at Nav Canada guidelines
- They originally wanted a 5 mile or 10 mile development-free zone around their facilty, but have realized that those expectations are not realistic
- Nav Canada has 2 files on the go forNExtEra's wind projects in this area.
  - Land Use File # 10-1632 for Goshen project
  - Land Use File # 10-1633 for the Bluewater project
  - o Paul Pinard is the land use specialist with these files for Nav Canada
  - o pinardp@navcanada.ca
  - o **613-248-4121**
- Transport Canada document TP 1247 has good information
- Some turbine blades look like airplane blades to radar systems
- provided some diagrams from the TP 1247 guide

From: Shute, Jeremy Sent: Wednesday, June 01, 2011 1:52 PM

Subject: BSRA - NextEra meeting notes

Here are the notes from our meeting this winter. I don't have the email addresses for the other BSRA participants. Can you send these notes along to them? Can you please let me know if these notes accurately reflect our discussion?

Also, I'm wondering if you received the newsletter NextEra recently produced and distributed? If so what did you think of it?

I hope you are enjoying a couple sunny days in a row. All the best, Jeremy

# Jeremy Shute, M.A., R.P.P.

T: 519-840-2253 (direct)

Cell: 519-993-2706

Jeremy.Shute@aecom.com

# AECOM's Guelph Office has recently moved!

Our new address is: 55 Wyndham Street North, Suite 215 Guelph, ON N1H 7T8 Main Phone Line (remains unchanged): 519-763-7783

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#### **NextEra Energy Communication Records**

#### Bluewater Shoreline Residents Association Meeting, February 17, 2011

- prepared an agenda for the meeting and distributed it to everyone in attendance (attached)
- There was discussion about how the contracts with OPA work. Notification should come sometime this summer whether or not there is a contract. The next studies to be undertaken this year will be archaeological and ecological to meet REA requirements. They are then submitted with the REA. Two things are needed before construction – a contract and REA approval.
- Question have there been changes to the process as a result of the court cases or any expected ? No, there have been no changes to the process.
- What would happen if there are new regulations that come out of the court cases for example 550 metres was moved to 800 metres? If the distance to receptors was changed to 800 metres, the number of turbine locations would be reduced. Some of the existing locations would be removed from consideration. The siting process is currently underway NextEra is not sure of number of turbines at this point.
- BSRA mentioned that they appreciated that NextEra had come to speak. Their concerns have deepened over time. The meeting agenda was discussed. Also the REA submission process was discussed. Timing of submission for public review was brought up. Many BSRA residents are away during winter, therefore a summer meeting is preferrable. There is talk about a potential public meeting in December. Perhaps there would also be other opportunities to meet with BSRA during the summer or early September.
- There was a question from BRSA about whether NextEra makes any concessions from issues raised at meetings. NextEra gave an example from another project in Ontario where the proximity to a school was raised, and NextEra removed that particular turbine.
- BSRA cautioned about the Tundra Swans and their flight path for Jericho project site. Swans come through this are around the 8<sup>th</sup> to 20<sup>th</sup> of March. This may be prior to the bird survey season. They also fly over the Goshen, Bluewater projects. They also feed inland. NextEra will be happy to share avian studies with the BSRA. The MNR will make NextEra shut down the turbines during certain seasons if there are unacceptable impacts to the tundra swan population. NextEra wants to avoid this potential if at all possible and mentioned that NextEra had ceased to consider a potential project site in the past due to Tundra Swan flight paths. BSRA mentioned that there are also monarch butterflies that migrate through the area.

- BSRA would like to ensure that the turbines are kept east of Highway 21. Setbacks were discussed. Also design issues and constraints were discussed. NextEra is going to try to keep each project as contiguous as possible. In terms of road crossings, BSRA mentioned that the east to west roads are gravel and the north south roads are paved.
- BSRA mentioned that in Wolfe Island, supplementary funding for the municipality was received, and that NextEra can expect a similar approach here. The tax revenue as it currently stands is not great from projects. Wolfe Island has set a precedent. Because the tax rate is low in Ontario, this Wolfe Island example is expected here. NextEra is hearing this from many municipalities and will take into consideration.
- BSRA mentioned that it is likely that NextEra will be seeing political action soon. The provincial government could change, and people are unhappy with the Green Energy Act. The Province may back away from implementation of the Green Energy Act as the election approaches. NextEra stated they are monitoring the political environment.
- There was a question about opt-out clauses from the government contracts. NextEra was not aware of such a clause.
- BSRA is concerned that they are going to see their energy costs triple and that this could lead to
  energy poverty. There was discussion about where the additional costs are coming from and
  how the additional costs should be attributed whether it's from new renewable energy or
  other aging infrastructure. BSRA and NextEra agreed to disagree and that such issues would not
  be resolved in this particular forum.
- BSRA mentioned that the community is divided. Their concern is that farmers are locked in to a contract and can't simply change their mind. As part of NextEra's process, landowners can participate as much as they would like about the decisions that affect their farms. BSRA mentioned that there is a certain level of alienation in the communities. It was suggested that putting wind turbines 1-2 km east of the Highway 21 would greatly reduce or possibly eliminate concerns from the BSRA. NextEra stated they would take that into consideration.
- NextEra's supply mix and operations were discussed. There was some discussion about what
  would happen if the provincial government changes. There was also some discussion about
  different models of energy production including one where the property owner has many
  smaller sources. This distributed model does not apply to any of the NextEra projects in this
  area. That model is usually called distributed power and would probably fall under the OPA.
  NextEra suspects that this is the direction OPA will probably go over the next couple of decades.
- There was a question about how BSRA and NextEra can work together in the future.
- The 2 km setback question is a prime one for the BSRA. BSRA also mentioned that 2 km setback is a World Health Organization recommendation. NextEra stated, that to their knowledge, the World Health Organization has not recommended a 2 km setback and asked if BSRA could provide documentation that supports that claim. I is going to try to find that World Health Organization reference. 1000 metre setback from the shoreline was also discussed. That would be from the shoreline, and not every individual home. The BSRA would also like 2 km from what they call a designated settlement area.

- [Note, both 1 km east of Highway 21 and 2 kms east of Highway 21 have been mentioned by BSRA in discussions between with NextEra, as have distances of 1 km and 2 km east of Lake Huron. It is not clear to the note taker (Jeremy Shute) if the 1km distance from Highway 21 is the minimum desired setback for BSRA and if 2 kms is a preferred setback or if 2 kms east from Highway 21 is the minimum desired setback distance.]
- NextEra wants to be a long-term partner in the community, and would like these sorts of discussions to continue. BSRA said that they are happy to have this meeting and NextEra appears to be listening to them.
- There was discussion that Huron County might implement a low-frequency noise bylaw. BSRA mentioned that health concerns are real, whether or not they are legitimate.
- BSRA speculated that if a group like Bluewater Against Wind Turbines was to form, it probably won't be NextEra that would be targeted, but the individual property owners that are signing lease agreements. Such a group might focus on raising awareness about liability issues. There has been a problem lately in the community with the local oil and gas company. The issues are being framed as David vs. Goliath. A likely strategy of Bluewater Against Wind Turbines would be to put pressure on individual landowners to get out of their leases.
- There was discussion about how the BSRA could have input into the REA studies. The avian studies are underway and will be sent to BSRA once they are completed. BSRA is welcome to send formal comments, and there was a discussion about the comment period. will send comments or notes as a submission.
- BSRA would like to talk to people who live near turbines in other projects. They are also curious about any projects that are near fresh water lakes. At this point NextEra is not interested in offshore wind development.
- Follow up actions:
  - Tom Bird is going to send avian studies to provide the provide the send avian studies to provide the send
  - o Jeremy Shute will prepare the minutes from this meeting and circulate to everyone.
  - will look for the World Health Organization reference and circulate to everyone.
  - It may be better to meet with Shoreline residents during the time when most residents are here – probably the end of the summer or early September. The BSRA have an annual meeting in August.

Feb 17/2011

# AGENDA: MEETING OF NEXTERA/AECOM AND MEMBERS OF THE BLUEWATER SHORELINE RESIDENTS' ASSOCIATION

Attending ? Jeremy Shute / Tom Bird Josie Hernandez //() Jow? -Nicole Geneau



# Purposes

 To continue and to extend the question/answer session begun at the June 28 Public Information Session concerning the Bluewater, Goshen, and Jericho Wind Energy Projects
 To receive an update from NextEra: current situation, next steps

3. To review BSRA concerns about the potential impacts of the wind farms in Bluewater

# Shoreline Concerns

1. Immediate:

- Set-backs from Lake Huron Shoreline and from Highway 21
- Differences in western boundaries between Bluewater and Goshen Projects
- 550 metre set-back too short
- Actual siting locations
- Bird studies completed satisfactorily

# 2. General:

- Provincial political issues: impact of 2011 election, results of Hanna Inquiry and Suncor's Kent Breeze case
- Municipal political issues: Council is badly divided, Opposition groups are developing throughout Huron County
- Sociological issues: the entire community of Bluewater is badly divided and close to a very serious level of anger, sense of alienation is very strong and spreading
- Environmental issues: "green energy" no longer seen as being environmentally friendly, no impact on closing coal-fired plants
- Economic issues: can we afford this development? will it really create many long term jobs for Huron County?

#### From: Sent: Tuesday, June 14, 2011 5:03 PM To: Shute, Jeremy Subject: Re: BSRA - NextEra meeting notes

Jeremy! Thank you for your email of June 02. You ask me if the notes reflect our discussion. Many parts of your notes do reflect the discussion well and some parts do not.

Your comments on the killing of Monarch Butterflies and the importance of the major migration route for this unique and well-loved species do NOT capture the urgency or the importance of this issue.

Recent discussions about noise levels focus on the gap between expected noise levels in any given area and the level of noise that is added by turbines - this should not amount to more than 6 decibels. The WHO setback information that we discussed earlier is now quite dated.

The minimum set-backs should be these: 2 km east of highway 21 and 2 km from all settlement (urban) areas. There should be no turbines west of 21.

Your use of the word "legitimate" regarding health concerns in the clause on health effects reflects a bias on the part of the wind energy developers that we do not share. The health concerns ARE real. The wind industry's definition of "health" is unreasonable in our view and your notes imply that health concerns may not be real. We believe that you are fundamentally wrong and that your argument is based on a distorted concept of what constitutes "health". It is cavalier to suggest that the health concerns of real people are not legitimate concerns.

Additional comments:

- The failure of NextEra to reveal the exact potential sites for the turbines has created tremendous anxiety within the community. The tension is palpable and much of the population is skeptical and angry. The protest movement is strong and the resistance is ubiquitous.
- What are the qualifications and biases of the people doing the avian studies and will they limit their studies only to the specified months (ignoring the fact that the Tundra Swans are here in March)? What is the meaning of the term "If at all possible" in the paragraph on Tundra Swans who will define the meaning of the term "possible"?

You ask me to comment on the recent issue of Wind Energy News. While portraying itself as a balanced and factual account, it clearly is not.

- As recently noted in the media, the bottom is about to fall out of the green energy economy. International pressure may soon force the Ontario government to change its domestic production requirement. Also the media increasingly is focusing on the fact that wind energy in European countries has had a negligible effect on the reduction of greenhouse gases there.
- Much of the Ontario population is coming to the realization that the FIT program is too costly and unsustainable, and that it will pass tremendous costs to an overburdened consumer both in this generation and the next.

- The maps reveal the discrepancy between the western boundary of the Bluewater Project relative to the western boundary of the Goshen Project. We have asked for an explanation but have not received a satisfactory answer.
- Your comments about the dangers to birds that are created by wind turbines are similar to the dangers caused by tall buildings are specious and city-oriented. There are NO tall buildings in this area.
- The comment that natural gas and coal-burning power plants "are this country's single greatest source of greenhouse-gas emissions" cleverly disguises the fact that the largest share of greenhouse-gas emissions are caused by industry and transportation, not power generation.
- The photos of wind turbines create the false image that they will be located far away from houses and barns. In fact, there are no buildings in the photos. This is deceptive.

# Sincerely,

On Wed, Jun 1, 2011 at 1:52 PM, Shute, Jeremy <<u>Jeremy.Shute@aecom.com</u>> wrote:

Here are the notes from our meeting this winter. I don't have the email addresses for the other BSRA participants. Can you send these notes along to them?

Can you please let me know if these notes accurately reflect our discussion?

Also, I'm wondering if you received the newsletter NextEra recently produced and distributed? If so what did you think of it?

I hope you are enjoying a couple sunny days in a row.

All the best,

Jeremy

# Jeremy Shute, M.A., R.P.P.

T: <u>519-840-2253</u> (direct)

Cell: <u>519-993-2706</u>

Jeremy.Shute@aecom.com

# AECOM's Guelph Office has recently moved!

Our new address is:

55 Wyndham Street North, Suite 215

Guelph, ON N1H 7T8

Main Phone Line (remains unchanged): 519-763-7783

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From: Shute, Jeremy Sent: Thursday, July 14, 2011 3:47 PM

Subject: Meeting notes - revised

Here are the notes from our last meeting revised with your comments. I have made changes to the paragraph on butterflies and birds, on the minimum setback distance from Highway 21, on health concerns, on the preparation of meeting notes and on the WHO report/sound setbacks.

Nice to speak with you this afternoon. All the best, Jeremy

# Jeremy Shute, M.A., R.P.P.

T: 519-840-2253 (direct)

Cell: 519-993-2706

Jeremy.Shute@aecom.com

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#### **NextEra Energy Communication Records**

#### Bluewater Shoreline Residents Association Meeting, February 17, 2011

Attendees: Tom Bird (NextEra - Project Manager, Environmental Services), **Services** (Hay West Ward Councillor), Neil Jones (NextEra - Project Director, Business Development, Jericho Project), **Service** BSRA – President), **Service** (BSRA - Past President), **Service** (BSRA – Resident), Jeremy Shute (AECOM – REA consultant to NextEra).

- prepared an agenda for the meeting and distributed it to everyone in attendance (attached)
- There was discussion about how the contracts with OPA work. Notification should come sometime this summer whether or not there is a contract. The next studies to be undertaken this year will be archaeological and ecological to meet REA requirements. They are then submitted with the REA. Two things are needed before construction – a contract and REA approval.
- Question have there been changes to the process as a result of the court cases or any expected ? No, there have been no changes to the process.
- What would happen if there are new regulations that come out of the court cases for example 550 metres was moved to 800 metres? If the distance to receptors was changed to 800 metres, the number of turbine locations would be reduced. Some of the existing locations would be removed from consideration. The siting process is currently underway – NextEra is not sure of number of turbines at this point.
- BSRA mentioned that they appreciated that NextEra had come to speak. Their concerns have deepened over time. The meeting agenda was discussed. Also the REA submission process was discussed. Timing of submission for public review was brought up. Many BSRA residents are away during winter, therefore a summer meeting is preferrable. There is talk about a potential public meeting in December. Perhaps there would also be other opportunities to meet with BSRA during the summer or early September.
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- BSRA would like to ensure that the turbines are kept east of Highway 21. Setbacks were discussed. Also design issues and constraints were discussed. NextEra is going to try to keep each project as contiguous as possible. In terms of road crossings, BSRA mentioned that the east to west roads are gravel and the north south roads are paved.
- BSRA mentioned that in Wolfe Island, supplementary funding for the municipality was received, and that NextEra can expect a similar approach here. The tax revenue as it currently stands is not great from projects. Wolfe Island has set a precedent. Because the tax rate is low in Ontario, this Wolfe Island example is expected here. NextEra is hearing this from many municipalities and will take into consideration.
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- There was a question about opt-out clauses from the government contracts. NextEra was not aware of such a clause.
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  energy poverty. There was discussion about where the additional costs are coming from and
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  other aging infrastructure. BSRA and NextEra agreed to disagree and that such issues would not
  be resolved in this particular forum.
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- There was a question about how BSRA and NextEra can work together in the future.
- The Two km setback question is a prime one for the BSRA. BSRA also mentioned that 2 km setback is a World Health Organization recommendation. NextEra stated, that to their knowledge, the World Health Organization has not recommended a 2 km setback and asked if BSRA could provide documentation that supports that claim. If is going to try to find that World Health Organization reference. 1000 metre setback from the shoreline was also discussed. That would be from the shoreline, and not every individual home. The BSRA would also like 2 km from what they call a designated settlement area.

- [Note, both 1 km east of Highway 21 and 2 kms east of Highway 21 have been mentioned by BSRA in discussions between with NextEra, as have distances of 1 km and 2 km east of Lake Huron. It is not clear to the note taker (Jeremy Shute) if the 1km distance from Highway 21 is the minimum desired setback for BSRA and if 2 kms is a preferred setback or if 2 kms east from Highway 21 is the minimum desired setback distance.]
- [Follow-up note. Further discussion with **Construction** has clarified that BSRA would like the minimum setback distance to be 2kms east of Highway 21]
- NextEra wants to be a long-term partner in the community, and would like these sorts of discussions to continue. BSRA said that they are happy to have this meeting and NextEra appears to be listening to them.
- There was discussion that Huron County might implement a low-frequency noise bylaw. BSRA mentioned that health concerns are real.
- BSRA speculated that if a group like Bluewater Against Wind Turbines was to form, it probably won't be NextEra that would be targeted, but the individual property owners that are signing lease agreements. Such a group might focus on raising awareness about liability issues. There has been a problem lately in the community with the local oil and gas company. The issues are being framed as David vs. Goliath. A likely strategy of Bluewater Against Wind Turbines would be to put pressure on individual landowners to get out of their leases.
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- BSRA would like to talk to people who live near turbines in other projects. They are also curious about any projects that are near fresh water lakes. At this point NextEra is not interested in offshore wind development.
- Follow up actions:
  - Tom Bird is going to send avian studies to once complete.
  - Jeremy Shute will prepare the minutes from this meeting and circulate to everyone.
     [Follow up note, the minutes were circulated to on his input, on July 14, 2011]
  - will look for the World Health Organization reference and circulate to everyone. [Follow-up note, the solution of the soluti
  - It may be better to meet with Shoreline residents during the time when most residents are here – probably the end of the summer or early September. The BSRA have an annual meeting in August.

Feb 17/2011

# AGENDA: MEETING OF NEXTERA/AECOM AND MEMBERS OF THE BLUEWATER SHORELINE RESIDENTS' ASSOCIATION

Attending? Jeremy Shute / Tom Bird Josie Hernandez Weil Jowes -Nicole Geneau

Purposes

1. To continue and to extend the question/answer session begun at the June 28 Public Information Session concerning the Bluewater, Goshen, and Jericho Wind Energy Projects 2. To receive an update from NextEra: current situation, next steps

3. To review BSRA concerns about the potential impacts of the wind farms in Bluewater

# Shoreline Concerns

1. Immediate:

- Set-backs from Lake Huron Shoreline and from Highway 21 .
- Differences in western boundaries between Bluewater and Goshen Projects .
- 550 metre set-back too short .
- Actual siting locations .
- Bird studies completed satisfactorily .

# 2. General:

- Provincial political issues: impact of 2011 election, results of Hanna Inquiry and • Suncor's Kent Breeze case
- Municipal political issues: Council is badly divided, Opposition groups are developing throughout Huron County
- Sociological issues: the entire community of Bluewater is badly divided and close to . a very serious level of anger, sense of alienation is very strong and spreading
- Environmental issues: "green energy" no longer seen as being environmentally ٠ friendly, no impact on closing coal-fired plants
- Economic issues: can we afford this development? will it really create many long . term jobs for Huron County?

# From: Dudek, Derek [mailto:Derek.Dudek@nexteraenergy.com] Sent: Tuesday, August 23, 2011 11:40 AM

# Subject: Follow up - August 10th meeting

Please send my thanks to the board members for meeting with me last night to discuss NextEra Energy Canada and our Bluewater and Goshen Wind Energy Centres. Just wanted to follow up with some information that was requested of us, and was hoping that you could disseminate the information to all those in attendance:

1. Concern over proximity of turbine locations to Village of Zurich and how it might impact future growth of the Village beyond the existing urban growth boundary within the Official Plan. A request was made that all turbines be located beyond 2km of this boundary.

# It should be noted that the definition of Zurich within the Municipality of Bluewater Official Plan Section 8.4.2.3 states the following: *"There is adequate land designated for residential development and*

new development should take place through infilling or by registered plan of subdivision on full Municipal services." However, I can confirm that based on draft layouts that are not yet available to the public we are not proposing any turbines within 2km to the north or west of the Village of Zurich beyond any planned growth within the current growth boundary. We do however, have several turbines planned for an area southeast of the Village that are located between 800m and 2km of the Village. These are located in an area beyond the town's sewage lagoons and nearer the 500kv overhead electrical transmission line. It is our opinion that these locations would not likely accommodate village growth based on required setbacks from the 50kv line and sewage lagoons. We hope that this information satisfies your concerns regarding future growth in Zurich. We appreciate that you will likely have further comments on this upon availability of the mapping showing our exact proposed locations, and will forward that information to you upon availability.

# 2. Confirmation of the Goshen WEC point of interconnection

I mistakenly noted that the Goshen substation and point of interconnection would be located along the 500kv line. The actual location is along the same 110kv line as the Bluewater project, but located in the very eastern portion of South Huron at a yet to be determined location near Highway 23.

3. Chamber members noted concerns over the interaction between proposed turbines and proposed underground gas storage wells being planned beneath our project area.

By way of this email, I have notified AECOM, our environmental consultants, of this concern. One of their many responsibilities will be reviewing all oil, gas, and salt resources and related infrastructure to determine potential impacts and possible mitigation measures as may be required between each projects infrastructure.

4. The Chamber noted interest in meeting with additional NextEra team members to discuss items related to construction and operations.

# To be arranged at your discretion.

# 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 <u>derek.dudek@nexteraenergy.com</u>

#### Sent: Saturday, September 10, 2011 12:34 PM To: Dudek, Derek

Subject: wind trubines your emial of Aug 23, 2011

Hello Derek;

Further to your email addressed to **addressed** ...as an initial reply we would advise that our position on setback reamins 1000 metres for future development and an additional 1000 metres as a setback.

We require these setbacks acknowledged in writing and committed to now and in the future.

With regard to the official plan for Bluewater, unfortunately it took no account of the possibility of wind turbines being installed close to the Village. Unfortunately, planners may use 20 years as the term of a plan but they like us do not have a way foretelling what the future will bring. Therefore we need to deal with this issue now and we need NextEra to reconize our concern and accomodate our request.

Regardless of the above and in addition to the above a committee of the Zurich and District Chamber of Commerce will be meeting to review our wind turbine concerns.

Thank you for the August 23rd email. We look forward to your further correspondence.



Sent: Thursday, October 27, 2011 10:34 PM To: SharedMailbox, BLUEWATER-WIND Subject: 'NO' to Wind Turbines

#### Energy at What Cost to our Beautiful Skies!!!!!!!!!!!

On receiving 'Wind Energy News' I am writing this email <u>totally opposed to the erecting of your Wind turbines</u>!!!!!! No amount of pro literature will ever persuade me to accept these huge monstrous sky creatures....if they are so very necessary then find remote non populated areas for there construction. There are now thousands of persons against your proposed sites!

#### PLEASE listen to the people to be affected by these sites and the God given beautiful horizons that will be ruined by your wind turbines.....

Ask the farmers whose land you have signed if they want them now that they have reviewed the \$\$\$\$ and the fact that the turbines just might become a reality and not free money for just signing....sounded good at the time....now what!

I am not apposed to the Green Energy Act or solar energy, or Bruce Power that is already established in our area. However I do believe that Green Energy should not have free reign to do as they please without the opinion of the municipalities involved and

I am <u>TOTALLY OPPOSED</u> to the <u>Wind Turbines</u> and will <u>NEVER</u> be persuaded that they are in the best interest of the <u>populated areas</u>.

They do not bring local jobs of any consequence to the areas that they are being erected and in fact promote people wanting to leave these areas......

We have attended meetings both pro & con and are convinced as to the admirable dedication of the 'Bluewater Against Turbines' - **B.A.T.** 

How wonderful that organized persons of influence have come forward to fight the 'Monsters in the Sky' 'Thank You' to their dedication in this fight.

Do we need escalating energy bills?

Local tourism in the Bluewater area will dwindle and significant economy will be lost to such a privileged and sought after, lake shore magnetic community.

How sad? Please do not let this happen!

I feel total empathy towards any community that the turbines have appeared and hope and pray that they never appear near my home or homes of my children or family.

Why do the inhabitants of rural areas **not have a say** in this invasion of our beautiful God Given Skies & Horizon?????? Do we not vote for the politicians to have our best interests in mind??

I do not believe that the farming community that has signed land over to these turbine companies realized the permanent consequences of their actions and the thought of free \$\$\$\$\$ was in all, totally misleading.....

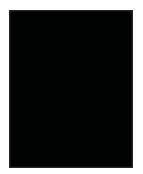
Solar energy, on the other hand, does not take over the horizon and can be accepted in rural areas as an alternate energy source ...........'as long as the sun shines'.

I am a passive person by nature, however this is an issue that I believe is pure nonsense and not in any way beneficial or necessary to the energy future of our country unless in remote unpopulated areas of this wonderful country of ours.

Never will we, or our families vote for a party that is **pro** Wind Turbines! Sincerely .....



#### September 2, 2011



I have reviewed your email of July 27<sup>th</sup>, and welcome this opportunity to respond.

As a member of the committee that toured the province for consultations on the Green Energy Act, I have heard extensive arguments on both sides of this issue. I have also met with a number of my Huron-Bruce constituents and municipalities. Local residents and municipalities continue to play an important role in the Renewable Energy Approvals process for wind development.

I continue to support the Green Energy Act as the best course for Huron-Bruce. It will provide jobs and income for our rural residents. I want my constituents to breathe clean air, and endorse clean energy whether it be from Bruce Power, wind or solar. Coal fired plants create health problems, which in turn place a huge burden on our health care system. This has been documented by the Canadian Medical Association.

The reality is that pollution is a serious concern for all of us. The Canadian Medical Association estimates that between 2008 and 2031, almost 90,000 Canadians will die from the acute effects of air pollution. That's not counting premature deaths from chronic effects, estimated at 710,000.

The Green Energy Act lays out solid, consistent rules for green energy projects. Part of that is the improved Renewable Energy Approval (REA) process, which will ensure that renewable energy projects are developed in a way that protects human health, the environment, and cultural and natural heritage. Existing rules under Ministry of Natural Resources' (MNR) Endangered Species Act will remain. As part of the REA for most project types, a study of the potential impacts on wildlife habitat must be completed to the satisfaction of the MNR. Applicants must obtain a permit under the Endangered Species Act from MNR should their project have the potential to negatively affect a species or habitat protected under the Act.

Ontario's standards for renewable energy projects are based on leading science. However, we will keep reviewing new information as it becomes available. At the end of the day, green energy is about our local farmers having another income opportunity – to harvest the wind within their current field of crops. It's about creating a strong, clean, and reliable energy system to meet our future needs. It's about creating jobs in an industry that is rapidly growing across the world. And, most importantly, it is about creating a cleaner environment for our children and grandchildren—something we can all get behind.

As the Member of Provincial Parliament for Huron-Bruce, I want to assure you that I have heard your concerns and will continue to share them with the Minister of the Environment. Last year, in response to feedback from our communities, the province announced that no off-shore wind projects would be located in Lake Huron while further scientific research is conducted.

Thank you for taking the time to send me your thoughts on this issue.

Sincerely,

ORIGINAL SIGNED BY

Carol Mitchell, MPP Huron-Bruce

CM/dc

From: Dudek, Derek [mailto:Derek.Dudek@nexteraenergy.com] Sent: Monday, November 07, 2011 2:07 PM

To: Cc: Subject: RE: wind trubines and Zurich & District Chamber of Commerce

### Hello

Yes I received your Sept 26, 2011 email and we have taken your comments into consideration.

our Bluewater WEC project are in excess of 2km from the northern boundary of the village (ie. north of Danceland Road). Those distances remain in effect at the Originally you had expressed that your group would like to see a 2km setback from the Zurich village boundary. We have illustrated that the closest turbines in current time.

Also, as per my previous email, we have managed to increase the distance of the nearest turbines in the Goshen WEC project to a distance of approximately expansion of Zurich beyond the areas of planned growth identified within the current urban growth boundary of Zurich. We do not feel that there is any 1.9km from the southerly boundary of Zurich (south of Rodgerville Road). We are still of the opinion that this should ample room for any possible future rationale for increasing this setback to 3km.

will have a copy of the draft turbine layout available for public review in early December in advance of our project meetings scheduled for Varna and Seaforth. I advances. I can assure you that the study area is still broad in scope and does not indicate which properties will have turbines placed on them. To that end, we We appreciate that the number of recent publications haven't shown the up to date study area, but such changes are occuring rapidly as the project planning hope that the changes outlined above address the concerns of those residents in Zurich whom you are speaking on behalf.

Thanks, and don't hesitate to contact me with any other questions you might have.

# 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

From:
Sent: Monday, November 07, 2011 12:13 PM
CC:
Subject: wind trubines and Zurich & District Chamber of Commerce
Hello Mr. Dudek;
I assume that you received our email of September 26, 2011.
oosien riojed vind chergy cente Area is exactly the same size as earler diagrams. Similarly the vind chergy cente Area for the Didewarer project is sized the same.
However a short week later we saw a large advertisement in the local papers and then received a letter from you firm which has drastically reduced the size of
the goshen wing cente Area such that there are now several knometers of a distance between the Lake Huron Shore and the wing Centre Area.

Centre Area, we are very pleased to see that you recognize the importance of great setbacks from settlement areas. We note in your diagrams that the distance from the Bluewater Lakeshore and Grand Bend is now between 2 3/4 Km and 6 Km. whereas you originally had this area only from 100 to 400 metres away. We Although we have been told that the wind coming from above Lake Huron is the principal reason that this area along Lake Huron has been suggested for a Wind are pleased that the Grand Bend and Bluewater Lakeshore persuasive efforts have achieved this setback. Now the only fair thing for Nextera Energy to do is to move the north boundary for the Goshen Wind Centre Area project from the current County Rd. #84 to a new boundary line running east and west at least 3 km. south of the existing boundary. The 1000 people living in Zurich deserve nothing less In addition to the above we are asking for clarity as to the exact road that has been used as the south boundary of the Bluewater Wind Centre Area project. Would you please advise the name of the road?

We will appreciate your quick agreement with our request. This should all be completed before the end of November 2011.

Sincerely

From: Dudek, Derek [mailto:Derek.Dudek@nexteraenergy.com] Sent: Wednesday, November 09, 2011 2:40 PM

Subject: RE:

I was actually just about to follow up with you from our last conversation when I received your email. If you don't mind, I'll forward your email around and make sure we get you a response back on all your questions....it may take a short while.

I'll touch base with you early next week to check on the status.

Thanks,

Derek 519-318-0237

Sent: Wednesday, November 09, 2011 8:42 AM To: SharedMailbox, BLUEWATER-WIND Subject:

November 9, 2011

Mr. Derek Dudek NextEra Energy Canada

The following is my response to your request for concerns regarding your Bluewater Wind Energy Centre. As discussed previously with Bluewater Council and your company I have questions about negative impacts associated with your proposed wind turbine installations in our community.

1) Private Airstrip: specifically, what consideration is being afforded to protect the safe and viable operation of this facility located on my property? Obstructions to safe take-offs and landings, horizontal turbulence abeam both ends and sides of the runway from vortexes, flashing strobe lights impairing vision during night operations, and safe low level maneuvering in poor weather conditions are all of concern. What impacts do wind turbines have on electronic aircraft navigation and communication systems such as GPS, UHF, VHF, RADAR, transponder, satellite reception (search and rescue), and weather information? Will the the Municipal Bylaw # 07-2009 regarding private airstrips be respected? Private meetings and correspondence with Nextera officials indicated a commitment to "work with me". Note the letter (by email) dated Feb 11,2009 from your project director. It clearly states that "in all cases, the intention of FPLE is that prior to taking any action we come to an agreement ensuring that you are reasonably reimbursed for lost crops and/or reasonable direct costs associated with altering your use of the land to facilitate wind development,"costs such as facility use and storage fees at local airports", construction costs to move airstrip, etc." If turbines prohibit or interfere with safe take-offs and

landings and pose a safety hazard I will be forced to use an alternate airport at extra expense and inconvenience. As well, Transport Canada has the authority to close a facility not deemed safe to operate. As you can see, compensation was offered for relocation of runway, relocation of aeroplane to another facility, storage fees at another facility etc. Do you intend to honour your commitment?

2) Effects to Wildlife: there are many raptors (mainly red-tailed hawks) in the woodlot South of our property and in our own woodlot to the West. In spring and fall there are many low flying migratory birds in our immediate area. Our woodlot has at present a healthy local ecosystem. Will their natural quiet habitat be harmed in any way? Will a third-party unbiased study be done that is not proponent funded?

3) Property Values: Will you provide a written guarantee that there will be no reduction in property values based on an independent appraisal before turbine project intentions, construction and operation?

4) Health Concerns: at present, it is very quiet and peaceful here. Any noise above ambient levels is noticeable but tolerable due to its intermittent nature. There is undisputed and recognized evidence that wind turbines can cause health issues. Why have people left their homes in other jurisdictions? Why are there secretive settlements and non-disclosure clauses? What recourse does a receptor have if noise from nearby turbines exceeds the regulations and/or causes any health issues including sleep disturbance? What is your procedure on dealing with complaints of turbines not in compliance with noise regulations? What is your response time for noise complaints?

5) Visual: specifically, what effect will wind turbines surrounding our property have on our present view of sunrises and sunsets? Do plans include siting turbines that will produce shadow flicker at sunrise and sunset, visible from our property? Will proximity activated strobe lights be installed to avoid continuous flashing at night?

6) Safety: what is the safe working distance {on our own property) in proximity to nearby turbines? Ice-throw in the winter, noise, mechanical malfunction and protection in adverse weather conditions are of concern?

7) Enjoyment of Property: our bush lane and woodlot are used in all seasons. Specifically, what are the expected noise levels, day or night, anywhere on our own property?

8) Reception: Will AM and FM radio, agricultural GPS guidance systems, short wave radio, satellite television signal reception and cell phone (including smart phones with Internet) operation be affected? At present the wind turbine and/or it's transmission lines several kilometers south of us causes interference to AM radio reception when driving within approx. 2 km. I use AM radio daily. Will the turbines in your proposal cause similar problems?

9) EMS services in our community: what impact will your project have on air-lift emergency response? What portions of Bluewater will be considered a no-fly zone?

10) Environment: is there any possibility our safe drinking water will be compromised by nearby construction? Will any field drainage tiles, ditches, or municipal drains on our property be affected?

11) Livestock: What recourse do I have if noise or stray voltage has any negative impacts on farm animals? Could nearby wind turbines limit construction of new facilities and pasture locations on our property?

12) Project expansion: are there plans for a larger number of turbines in our community in the future?

13) How many turbines are you proposing to build within a 2km radius of our property?





#### January 24, 2012



The purpose of this letter is to address your questions outlined in your email of November 9, 2011. Our responses follow your initial questions. Please see below:

#### Question 1)

Private Airstrip: specifically, what consideration is being afforded to protect the safe and viable operation of this facility located on my property? Obstructions to safe take-offs and landings, horizontal turbulence abeam both ends and sides of the runway from vortexes, flashing strobe lights impairing vision during night operations, and safe low level maneuvering in poor weather conditions are all of concern. What impacts do wind turbines have on electronic aircraft navigation and communication systems such as GPS, UHF, VHF, RADAR, transponder, satellite reception (search and rescue), and weather information? Will the the Municipal Bylaw # 07-2009 regarding private airstrips be respected? Private meetings and correspondence with Nextera officials indicated a commitment to "work with me". Note the letter (by email) dated Feb 11,2009 from your project director. It clearly states that "in all cases, the intention of FPLE is that prior to taking any action we come to an agreement ensuring that you are reasonably reimbursed for lost crops and/or reasonable direct costs associated with altering your use of the land to facilitate wind development, "costs such as facility use and storage fees at local airports", construction costs to move airstrip, etc." If turbines prohibit or interfere with safe take-offs and landings and pose a safety hazard I will be forced to use an alternate airport at extra expense and inconvenience. As well, Transport Canada has the authority to close a facility not deemed safe to operate. As you can see, compensation was offered for relocation of runway, relocation of aeroplane to another facility, storage fees at another facility etc. Do you intend to honour your commitment?

#### Response:

We will honour commitments made, as described, in earlier correspondence. As we move closer to a layout for submission in the Renewable Energy Approval process for the Bluewater project, we intend to further our discussions with you on a one-on-one basis. You have already seen a draft layout and we are currently in the process of considering feedback to that layout that we received in December during our consultation efforts. It is a priority for us to share any updates with you when they are available.

We are required to undertake a study to determine the impacts on radiocommunication and radar systems. The guidelines for this study are found here: <u>http://www.rabc-cccr.ca/home.cfm?lang=en</u>. It is difficult to determine what, if any impact there will be on such local services until such time as our study is completed. However, we will work with local landowners to find acceptable means of mitigation of any impacts (if there are any) on a site specific basis.

#### Question 2)

Effects to Wildlife: there are many raptors (mainly red-tailed hawks) in the woodlot South of our property and in our own woodlot to the West. In spring and fall there are many low flying migratory birds in our

#### NextEra Energy Canada, ULC

immediate area. Our woodlot has at present a healthy local ecosystem. Will their natural quiet habitat be harmed in any way? Will a third-party unbiased study be done that is not proponent funded?

#### Response:

The Natural Heritage Assessment (NHA) Report is being prepared by AECOM, a consulting company hired by NextEra to fulfill the study requirements outlined by the Ministry of Natural Resources. AECOM has experienced aquatic and terrestrial biologists who conduct the field work and will prepare the reports in accordance with Ontario Regulation 359/09. The NHA Report will be reviewed by the Ministry of Natural Resources to ensure it meets provincial requirements for conducting the necessary baseline environmental studies and identifies mitigation measures should any impacts be anticipated and monitoring commitments to ensure that operations are in line with expectations. A draft NHA report will be released for public review 60 days prior to the final public consultation meeting. At this time, based on field work to date, we have sited turbines at a distance from all woodlots that is compliant with Provincial requirements, and expected to have a minimal impact on avian species and habitat. We are also bound by the Province to undertake post-construction monitoring for 3 years to ensure that mitigation measures and recommendations outlined in our studies and reports are applicable.

#### Question 3)

Property Values: Will you provide a written guarantee that there will be no reduction in property values based on an independent appraisal before turbine project intentions, construction and operation?

#### Response:

This is not a regulated requirement by the Province of Ontario, and to the best of our knowledge, it is not a practice utilized for any type of neighbouring land uses within the Province, be they residential, commercial, industrial or otherwise. The purpose of setbacks enacted through land use regulations is to ensure that sensitive land uses are afforded appropriate distances from land uses which could have a negative impact associated with public health or loss of amenity. We will build our projects to be compliant with such setbacks.

#### Question 4)

Health Concerns: at present, it is very quiet and peaceful here. Any noise above ambient levels is noticeable but tolerable due to its intermittent nature. There is undisputed and recognized evidence that wind turbines can cause health issues. Why have people left their homes in other jurisdictions? Why are there secretive settlements and non-disclosure clauses? What recourse does a receptor have if noise from nearby turbines exceeds the regulations and/or causes any health issues including sleep disturbance? What is your procedure on dealing with complaints of turbines not in compliance with noise regulations? What is your response time for noise complaints?

#### Response:

NextEra is not aware of any scientifically, peer-reviewed studies that demonstrate a link between wind turbines and negative health effects. Nevertheless, NextEra takes human health and concerns raised by members of the public very seriously. We strive to build long-term, beneficial, relationships with the communities in which we seek to operate a wind energy centre. As such, NextEra will establish an Emergency Response and Communication Plan as part of our approvals for this project. This will outline procedures to protect its workers, the public, and the environment and also include a complaint protocol for addressing any issues, if they arise. This Plan will be available to be reviewed by the public and the local authorities to ensure it satisfies local needs. NextEra cannot comment on any health claims, settlements, or non-disclosure agreements relating to projects it is not involved in.

#### Question 5)

Visual: specifically, what effect will wind turbines surrounding our property have on our present view of sunrises and sunsets? Do plans include siting turbines that will produce shadow flicker at sunrise and sunset,

visible from our property? Will proximity activated strobe lights be installed to avoid continuous flashing at night?

#### Response:

At present there are turbines located east and west of your property that will be visible at sunrise and sunset. During certain times of year the sun will rise/set in line with the turbines. Shadow flicker may occur at other times of the day when the sun/turbine/house are all in alignment and atmospheric conditions are right. We will be undertaking a shadow flicker study as part of our project review and can discuss the results with respect to your property in more detail when it is completed. Given the limited and variable nature of shadow flicker and the uncertainty regarding complaints that might arise, it is our company policy to deal with such matters on a case by case basis. Night-lighting of turbines has not been finalized and will be undertaken in accordance with federal requirements.

#### Questions 6)

Safety: what is the safe working distance {on our own property) in proximity to nearby turbines? Ice-throw in the winter, noise, mechanical malfunction and protection in adverse weather conditions are of concern?

#### Response:

Turbines must be setback a minimum of hub height (80 metres) from a neighbouring lot line, or may be reduced to blade length + 10 metres (60 metres) where a study is undertaken to determine the likelihood of any negative impact on surrounding lands. Studies have been undertaken to determine the appropriate distances based on the likelihood of impacts to public safety under scenarios as you've described above.

#### Question 7)

Enjoyment of Property: our bush lane and woodlot are used in all seasons. Specifically, what are the expected noise levels, day or night, anywhere on our own property?

#### Response:

Our noise study, once published, will identify the expected noise levels on all areas of your property. Generally, there should be no impact on the enjoyment of property based on sound levels.

#### Question 8)

Reception: Will AM and FM radio, agricultural GPS guidance systems, short wave radio, satellite television signal reception and cell phone (including smart phones with Internet) operation be affected? At present the wind turbine and/or it's transmission lines several kilometers south of us causes interference to AM radio reception when driving within approx. 2 km. I use AM radio daily. Will the turbines in your proposal cause similar problems?

#### Response:

We are required to undertake a study to determine the impacts on radio, communication and radar systems. The guidelines for this study are found here: <u>http://www.rabc-cccr.ca/home.cfm?lang=en</u>. It is difficult to determine what if any impact there will be on such local services until such time as our study is completed. However, we will work with local landowners to find acceptable means of mitigation of any impacts on a site specific basis.

#### Question 9)

EMS services in our community: what impact will your project have on air-lift emergency response? What portions of Bluewater will be considered a no-fly zone?

#### Response:

We are required to prepare an Emergency Response and Communication Plan to be reviewed by the local EMS bodies. We expect to have no impact on emergency air-lift activities. In addition to onsite personnel, NextEra Energy Canada, ULC

our operations are centrally monitored 24 hours a day, 365 days of year, and can be shut down immediately in emergency circumstances.

#### Question 10)

Environment: is there any possibility our safe drinking water will be compromised by nearby construction? Will any field drainage tiles, ditches, or municipal drains on our property be affected?

#### Response:

We will be subject to a construction plan and operations plan to be approved by the Ministry of the Environment which will review all potential threats to the environment; expected levels of impact; and mitigation measures to be put in place during such time. Any damage to farmers' drains will be remedied at the time of construction. Damage to private or municipal drains will be repaired, and impacts during construction will be mitigated through common construction best management practices (ie. Silt fencing, baling, etc). We do not anticipate any such impacts to your property as no construction activity will occur on your property.

#### Question 11)

Livestock: What recourse do I have if noise or stray voltage has any negative impacts on farm animals? Could nearby wind turbines limit construction of new facilities and pasture locations on our property?

#### Response:

We do not know of any noise issues associated with livestock facilities and operate many wind turbines in close proximity to such facilities elsewhere in North America. Stray voltage is not a result of wind energy production, but rather improper electrical design at the distribution level (most commonly due to poor wiring in older barns and sheds). There is a program in place with Hydro One to deal with such situations. There are currently no regulations in place in Ontario that would limit the construction of new or expanded livestock facilities within proximity of an existing wind turbine. In our experience, livestock, and cattle in particular, graze right up to the edge of turbines when they are placed within a pasture field.

#### Question 12)

Project expansion: are there plans for a larger number of turbines in our community in the future?

#### Response:

We do not have any plans to expand the Bluewater Wind Energy Centre project.

#### Question 13)

How many turbines are you proposing to build within a 2km radius of our property?

#### Response:

The current draft layout shows six (6) turbines within 2km of your property (see attached map). This layout was released publicly on the week of December 5, 2011 and is available for review on the Project website: <a href="https://www.NextEraEnergyCanada.com">www.NextEraEnergyCanada.com</a>.

We are currently considering all comments and feedback received regarding that layout and incorporating multiple perspectives. It is our goal to accommodate as many people's wishes as possible. We would be happy to discuss this with you further at your convenience. If you have any futher questions, or concerns, please do not hesitate to give me a call or send me an email.

Thank you,

J-1 J-M

Derek Dudek Community Relations

cc: Julia Cushing, AECOM cc: Nicole Geneau, NextEra Energy Canada

NextEra Energy Canada, ULC

From: Sent: To: Subject:	Dudek, Derek [Derek.Dudek@nexteraenergy.com] Tuesday, November 15, 2011 4:14 PM RE: Bluewater Wind Farm
Hello	
Thank you for your inqui project. We will be form 7th.	Thank you for your inquiry regarding the Bluewater Wind Energy Centre. We understand your concern and want to share with you information about our project. We will be formally releasing a draft turbine layout for public review in early December, which will be available at the Seaforth meeting on December 7th.
We have reviewed your turbine. However, ther exceed all the regulatior	We have reviewed your address in connection with the latest internal draft layout, which shows a setback of approximately 750 metres to the northernmost turbine. However, there are no other turbines currently within 1.5km of your property. NextEra Energy Canada's projects have been designed to meet or exceed all the regulations prescribed by the Ministry of Environment.
Wind projects must sho Province to site our turk wind speeds) at nearby Canada will have a comr	Wind projects must show that they meet the sound limit requirements prescribed by the Ministry of the Environment. I can confirm that we are required by the Province to site our turbines in a manner that is intended to protect public health and safety and model our layouts based on a maximum of 40-45 dba (based on wind speeds) at nearby dwellings. This is consistent with the World Health Organization recommendations for noise level limits at dwellings. NextEra Energy Canada will have a communication program in place to address any concerns related to the operation of the project, should they arise.
Thank you and please d	Thank you and please don't hesitate to contace me if you have any other questions.
Derek Dudek  Community Relatic NextEra Energy Canada, ULC 5500 North Service Road, Burlingt 0:905.335.4904 x18 f:905.335 mobile - 519.318.0237 derek.dudek@nexteraenergy.com	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: Monday, November 14, 2011 8:04 PM To: SharedMailbox, BLUEWATER-WIND Subject: Bluewater Wind Farm

Derek Dudek,

We recently received a notice about public meetings in the mail and plan on attending the meeting in Seaforth. We are not opposed by any means to green energy, however we are opposed to wind towers in close proximity to residences. We would be strongly opposed to wind towers within one kilometre of our home and feel that should be the minimum setback allowance to non participating residences. We would appreciate a response to this.

Thank you for your time



From: Dudek, Derek [mailto:Derek.Dudek@nexteraenergy.com] Sent: Monday, December 12, 2011 11:16 AM

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

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 0:905.335.4904 x18 f:905.335.5731 mobile - 519.318.0237 derek.dudek@nexteraenergy.com

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: Hernandez, Joselen [mailto:Joselen.Hernandez@nexteraenergy.com] Sent: Wednesday, December 14, 2011 12:11 PM

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

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.nexteraenergycanada.com/projects/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 joselen.hernandez@NextEraEnergy.com

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" <<u>Joselen.Hernandez@nexteraenergy.com</u>>

Sent: Tuesday, December 13, 2011 9:49:09 AM Subject: NextEra Energy Canada - Information on the Bluewater and Goshen projects

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 <u>www.NextEraEnergyCanada.com</u>. 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



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



NextEra Energy Canada 5500 N. Service Road, Suite 205 Burlington, Ont L7L 6W6

Dec. 13, 2011

re: Bluewater wind turbine project Municipality of Bluewater, County of Huron

Dear Sir,

my name is **an end of the matrix of an end**. If we with my family at in the Municipality of Bluewater. We have a small acreage property consisting of about 4 acres.

I recently attended an information meeting held by your company in Zurich Ont. on Dec 6, 2011, where I was able to look at maps of the area, and the proposed wind turbine sites for the project.

Two of the sites to the east of our property look to be within the 550 metre setback limit set out in the Green Energy Act. As well, there are two proposed sites to the west of our property that are within 1000 metres of our home. There are also 4 maybe 5 more sites that are within 1500 metres of our property. All together that would be 9 wind turbines surrounding our home.

The long term health effects of wind turbines remains to be seen, but the negative effects on property values is already evident in our area. A neighbour with a small acreage property down the road did not receive one offer when he listed his property this year. I am particularly concerned with the two sites to the east of our property. Both I believe are within the 550 metre setback. They are also very close together compared with the rest of the sites on the map. In my opinion there is a crowding issue around our property that should be addressed.

I understand that you are willing to discuss peoples concerns in the area, and that all of these sites are not finalized.

I look forward to speaking with someone from your company about our concerns as soon as possible.

Thankyou



#### January 18, 2012



As per our earlier telephone conversations, I'm writing to provide you with answers to your questions with respect to NextEra Energy Canada's proposed route for the overhead 115kV transmission line for our Bluewater Wind Energy Centre project. Please find below our understanding of your questions in *italics* followed by our response in **bold**:

#### 1. Why are we trying to buy 26 acres next to the Seaforth Transformer Station, if we are hooking into the existing station?

At one time in 2011 we considered the option of connecting to a feeder located outside the Seaforth transformer substation (point of interconnect) vs. the current plan to connect inside the Seaforth transformer substation. At that time we were still in discussions with HONI to determine the best solution to interconnect, which included purchasing land adjacent to the substation. But since then, we have confirmed with HONI that this is not necessary and we are no longer pursuing a land purchase.

#### 2. Can a 115kV line be buried?

Technically speaking, almost any size transmission or distribution line could be engineered to be buried. However, burying high voltage power lines pose challenges of which nearly every power provider prefer to avoid and that is why you rarely find buried power lines. Some of those reasons include:

- Burying transmission is much more expensive than installing overhead transmission. Some estimates put the cost of burying cables at transmission voltages as several times greater than overhead power lines. Further, the life-cycle cost of an underground power cable can be two to four times the cost of an overhead power line.
- Finding and repairing underground damage can take days or weeks, whereas overhead wire breaks can be found and repaired in hours.
- Underground power cables, due to their proximity to earth, cannot be maintained live, whereas overhead power cables can.

#### 3. Definition of "dirty electricity"?

The term dirty electricity generally refers to unusable electrical energy (radio frequencies), which produce harmonics and transients that flow along electrical power lines. Both HONI and the Independent Electricity Systems Operator (IESO) have completed the technical studies related to our transmission line and concluded that the Bluewater WEC transmission line will not have adverse impact on the reliability of the system or the affected customers per the Customer Impact Assessment report. Therefore we do not anticipate unacceptable levels of harmonics or transients.

It should be noted that there is nothing unique about the electricity moving through the Bluewater WEC proposed transmission line as compared to any other transmission network found in Canada.

#### NextEra Energy Canada, ULC

Within Ontario, power provider transmission lines of varying sizes are common within our environment and those lines are built in accordance with the Distribution System Code, the Transmission System Code (both managed by the Ontario Energy Board), the Canadian Standards Association, the Ontario Electricity Act and the Electrical Safety Authority to ensure public safety. By following these stringent requirements, we feel that the safety and welfare of public is considered.

#### 4. Are there setbacks from high voltage lines in Ontario?

Beyond safe operating distances for physical work in proximity to power lines (3m), there are no specific setbacks in Ontario. Rather, safe setbacks distances vary depending on the obstacle that requires the setback. Transmission lines are built in accordance with the Distribution System Code, the Transmission System Code (both managed by the Ontario Energy Board, the Canadian Standards Association, the <u>Electricity Act</u> and the Electrical Safety Authority to ensure public safety. However, where possible, greater than required setbacks will be used in order to add a degree of safety.

#### 5. Why can't we connect to 500kV line in Bluewater?

Prior to injecting new power into any transmission network, a power provider must work with the owner(s) of the existing infrastructure to determine how the injection of new power affects the network and its infrastructure, including future commitments. After extensive discussions with HONI, the Bluewater Wind Energy Center (WEC) is being required to connect directly to the 115kV bus at the Seaforth Transformer Station.

I hope this helps to explain further our route selection. Please do not hesitate to contact me if you have any other questions.

Thank you,

J-1 J-M

Derek Dudek Community & Municipal Relations Consultant



January 18, 2012



As per our earlier telephone conversations, I'm writing to provide you with information respecting how NextEra Energy Canada chose the proposed route for the overhead 115kV transmission line for the Bluewater Wind Energy Centre project.

Firstly, it is important to note that transmission lines are built in accordance with the Distribution System Code and the Transmission System Code (both managed by the Ontario Energy Board, the Canadian Standards Association, the Electricity Act and the Electrical Safety Authority) to ensure public safety. We are aware that the proposed transmission route passes along the road near the school on Centennial Road. However, by following these stringent requirements we feel that the safety and welfare of the public is being considered.

Further, the selection of our preferred transmission route selection is dependent on a number of variables, some of which include:

- Impact on existing homes, buildings, and other structures (cell towers, grain bins, etc.) along the route
- Impact of length, terrain, angles, obstacles, and special crossing on the strength and cost of the line.
- Impact of existing overhead and underground utilities paralleling or crossing the route. (Electric lines, telecommunications, gas, oil, water, sewer system, drainage, etc.)
- Ease and cost of maintenance, including the maintenance of tree trimming.
- Availability, restrictions, or limitations on the use of certain public rights of way.
- Impact of line on land use, environment, and on historical, archaeological, or biologically sensitive sites or areas.

Consideration of all these variables was taken into account prior to choosing our route. I hope this helps to explain further our route selection. Please do not hesitate to contact me if you have any other questions.

Thank you,

V-1 V-L

Derek Dudek Community & Municipal Relations Consultant



January 23, 2012



As per our earlier telephone conversations, I have had a map prepared to illustrate the distances of our proposed turbines T19 and T20 to your dwelling and outbuildings in order to confirm that they do in fact exceed the minimum setback distance of 550 metres from a wind turbine as regulated by the Province of Ontario. Distances to the dwelling and the most easterly outbuilding are shown for each turbine. In addition, we have provided the distance of your dwelling to the existing 500kV overhead HONI transmission line for reference purposes.

In addition, I have researched the zoning on the retained farm lands from which your lot was severed approximately 5 years ago according to your estimation, to determine whether they prohibited buildings and structures which may inform our siting process. As per Township of Stanley ZBL 22-1985, the retained lands were rezoned AG1-16 with regulations prohibiting only a residence on the property, by amending By-law 06-2006. It should be noted that Part V (ie. Zoning by-laws) of the Planning Act does not apply to renewable energy projects, but we do respect the intent of zoning as a matter of ensuring that local land use issues are taken into consideration as part of our overall approvals process.

I hope this helps to illustrate the proposed setbacks from your property. Please do not hesitate to contact me if you have any other questions.

Thank you,

V-1 V-

Derek Dudek Community & Municipal Relations Consultant

Attachment

Sent: Tuesday, January 24, 2012 2:13 PM To: Dudek, Derek; Geneau, Nicole

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



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

**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 Bluewater 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,





From: Dudek, Derek [mailto:Derek.Dudek@nexteraenergy.com] Sent: Thursday, May 10, 2012 10:27 AM

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

## 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 0:905.335.4904 x18 f:905.335.5731 mobile - 519.318.0237 derek.dudek@nexteraenergy.com

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#### 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 available for the public to view and comment on ?? THANKS

----- Original Message -----From: <u>Dudek, Derek</u>

Sent: Wednesday, April 25, 2012 4:58 PM Subject: Bluewater - Varna Wind Inc - Question to Marc Rose

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:	
Sent:	
Го:	
Cc:	
Subject:	
Attachments:	

Dudek, Derek [Derek.Dudek@nexteraenergy.com] Friday, April 13, 2012 9:07 AM

Bluewater Goshen - Zurich CC letters Itr\_gos\_zurichchamber2012-04-12.pdf; Itr\_blw\_zurichchamber2012-04-12.pdf

Attached are the responses to your earlier emails...hard copies are in the mail. There are two letters separated by project for Bluewater and Goshen. I have copied the Bluewater CAO on this email at your request.

Thanks and don't hesitate to contact me with any other questions you and/or your organization might have.

Take care,

#### 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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April 12, 2012



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

on

...in the case of the Bluewater Project, turbines known as "6" and "31" are still within the project boundaaries. ... we require a letter from NextEraEnergy that states that apart from the two turbines previously mentioned, no additional wind turbines will be installed now, or in the future, within the Bluewater Project south of a line running east and west one half the distance between Danceland Road and Kippen 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 the Bluewater 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 committed to 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,

V-1 V-

Derek Dudek Community & Municipal Relations Consultant

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

NextEra Energy Canada, ULC



April 12, 2012



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

on

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,

V-1 V-L

Derek Dudek Community & Municipal Relations Consultant

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

From: Sent: Friday, April 13, 2012 10:19 AM To: SharedMailbox, BLUEWATER-WIND Subject: Ontario's West Coast - my home Why must you build these monstrosities in highly populated residential areas!? No one comes from the City to enjoy Nature and watch blades in the wind! I feel sorry for you. Build in Canada where the wind blows and people don't make a life there. How this affects me and my neighbours – you obviously don't care – not polite to comment.

Dashwood, ON

From:
Sent:

Dudek, Derek [Derek.Dudek@nexteraenergy.com] Thursday, May 03, 2012 2:22 PM

Subject:

Bluewater - tele-town hall

We will not be posting transcripts of the telephone town hall events, but we do hope these calls are a useful way to reach out to us for more information, in addition to our public meetings and communications. Many of the questions and responses from the call will be summarized in our next newsletter, which is slated for a summer release. In the meantime, we are always available to answer any questions you might have.

Thank you,

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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comments: I regret not being available for your town hall telephone call last evening. Was the conversation recorded, so that I could review what was said?

Submit1: Submit Form

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Sunich and Distnict CHAMBER OF COMMERCE

ZURICH, ONTARIO NOM 2TO



May 17, 2012

The Honourable Jim Bradley, Minister of the Environment 77 Wellesley St. W., 11<sup>th</sup> Floor, Ferguson Block Toronto, ON M7A 2T5 Council, Municipality of Bluewater 14 Mill Ave., Zurich, ON N0M 2T0 Ontario Power Authority FIT Program Suite 1600 120 Adelaide St. W., Toronto, ON M5H 1T1

The Honourable Chris Bentley Minister of Energy 4<sup>th</sup> Floor, Hearst Block 900 Bay St. Toronto, ON M7A 2E1 Lisa Thompson, MPP Room 430 Main Legislative Bldg. Queen's Park Toronto, ON M7A 1A8

NextEra Energy Canada,ULC Bluewater Wind Energy Project and Goshen Wind Energy Project, 5500 N. Service Rd., Suite 205 Burlington, ON L7L 6W6

Dear Sir/Madam;

NextEra Energy, Canada ULC have several wind energy projects including two known as Goshen and Bluewater that they intend to build. If these two projects are built, they will surround the Village of Zurich and its urban area beyond the Village limits. The Zurich and District Chamber of Commerce as any Chamber of Commerce, works for the success and best interest of its community. At a meeting in August 2011, the Chamber advised Derek Dudek of NextEra Energy that the Chamber was concerned about the proximity of the Bluewater and Goshen projects to the Village of Zurich. The Chamber explained to Mr. Dudek that considering the longevity of the wind energy projects it appeared that Zurich would be limited in future development. We further explained to Mr. Dudek that in addition we had received information and evidence that clearly indicates real estate values fall in the Communities that are near wind energy projects. Not only did real estate values fall but those communities in close proximity to wind energy projects but continued to have long term depressed real estate values compared to other communities. Buyers of residential real estate and businesses avoid communities in close proximity to wind energy projects.

There were several emails between Derek Dudek and the Chamber of Commerce after the August meeting, with the Chamber urging Mr. Dudek to reveal to the Chamber an indication were NextEra planned the turbines surrounding Zurich in the two projects, but Mr. Dudek did not provide that information.

Subsequent to this, commencing in November 2011 the Chamber of Commerce wrote three email letters to NextEra asking for a project boundary around Zurich that was a relatively small distance further from Zurich than was shown in the plans that had been released by NextEra for the Goshen and Bluewater projects. We asked the Council of the Municipality of Bluewater at their December 5, 2011 meeting to support our request and they did so unanimously.

The area requested by the Chamber of Commerce as space to be free of any wind farm infrastructure varies from 1 KM to slightly over 2 KM from the edge of the Zurich Community. We consider this a relatively small request considering that until recently NextEra showed the north boundary of the Goshen Project bisecting through the centre of Zurich and the south boundary of the Bluewater Project only the first road north of Zurich.

When the turbine layout was released on both projects, it was apparent that under the Goshen project five turbines and under the Bluewater project, two turbines, a total of seven turbines were proposed to be erected within the space that the Zurich Chamber of Commerce requested be excluded from these Projects.

Reluctantly, the Chamber decided to request that it's proposed boundary be maintained and that the Chamber would consent to the seven turbines within the open space around Zurich. The Chamber however requested some movement away from Zurich of each these turbines on the existing farms would be helpful. NextEra refused to move the turbines even a few metres and refused to move the boundaries to that requested by the Chamber.

The Chamber requested that as a start please move the north boundary of the Goshen project out of Zurich. NextEra said they might move that boundary somewhat but for the next several months nothing happened. The Chamber went back to Derek Dudek of NextEra with one simple and final request. If we must, we will accept that Next Era does not wish to move the boundaries of either project. The Chamber will continue to accept the seven turbines that are to be within the area around Zurich. However, we require a letter relevant to both the Bluewater and Goshen Wind Project sent to the Chamber and the Council of Bluewater Municipality. This letter must contain a promise that with the exception of the seven turbines, there will be no additional turbines installed in the Chamber designated area around Zurich now or in the future. This final request to NextEra required that the letters form part of the application to the Province of Ontario for approval of the Bluewater and Goshen Project. Instead of receiving the requested letter, NextEra proceeded to send a letter to the Chamber and the Municipal Council which recognizes and accepts the concession of the Chamber to accept the seven turbines and advises that NextEra refuses to commit to no further turbine additions in the proposed area around Zurich.

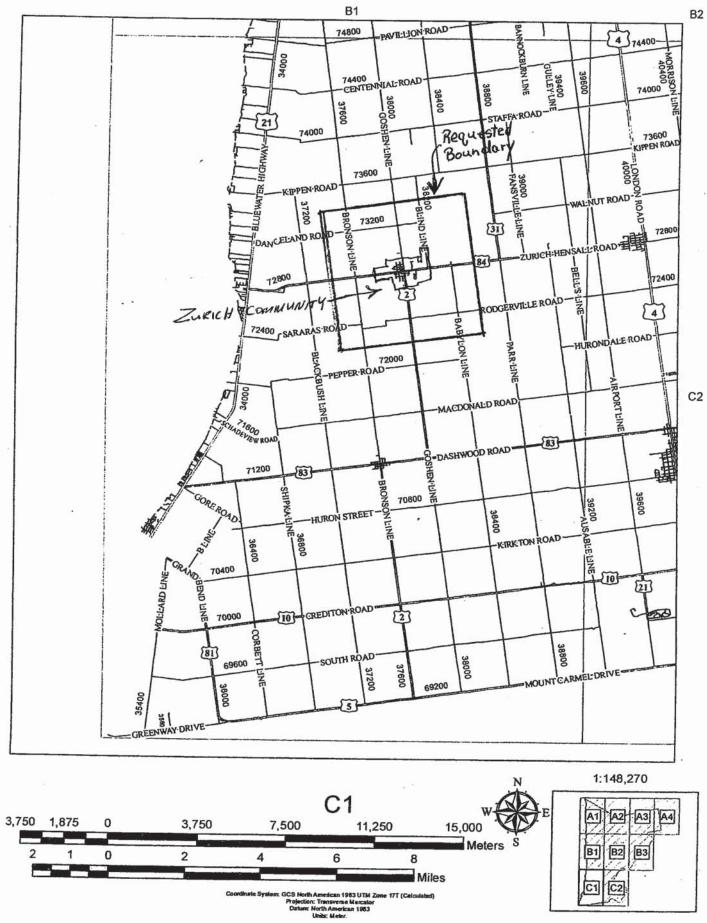
A telephone call with Derek Dudek on April 13, 2012 resulted from that emailletter advice, and this call strongly questioned why there was so little regard for the citizens of the Zurich community that the north boundary of the Goshen project still ran through the middle of the Village. A few weeks later NextEra moved there boundary south to the first road out of Zurich, keeping all of their planned turbines and not the boundary requested.

The Chamber of Commerce has consented to all of NextEra's requirement for turbines near Zurich although seven are located within the buffer area. It is clear that the Chamber of Commerce has been generous with its accommodation of NextEra Energy. It is clear that the Zurich and District Chamber of Commerce has been negotiating with itself.

The Zurich and District Chamber of Commerce respectively requests that either NextEra Energy Canada ULC or the appropriate Ministry of the Province of Ontario enforce that no additional wind turbine placement occurs within the boundary area around Zurich now and in the future as proposed by the Chamber of Commerce and as it applies to NextEra's Bluewater and Goshen Projects with the exception, as currently shown, of turbines "2", "3", "4", "7" and "10" in the Goshen Project and with the exception, as currently shown, of turbines "6" and "31" in the Bluewater Project. The Chamber requests that one or more of the parties mentioned above provide a commitment letter, concerning this request, to the Zurich and District Chamber of Commerce and the Municipality of Bluewater.

Sincerely

**Zurich and District Chamber of Commerce** 



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## Main Identity

From: To:	"Dudek, Derek" <derek.dudek@nexteraenergy.com>: <nicole.geneau@nexteraenergy.com></nicole.geneau@nexteraenergy.com></derek.dudek@nexteraenergy.com>
Cc:	
Sent:	Thursday, March 08, 2012 3:49 PM

**Subject:** Re: boundaries of NextEra Energy wind energy projects - Goshen and Bluewater Hello Derek and Nicole;

Thank you Derek for sending your reply so that the Chamber of Commerce was able to review the reply at its Feb 20/12 meeting.

Unfortunately the response did not resolve the request of the Chamaber of Commerce. Nonetheless, the Chamber entered into considerable discussion, not without some frustration, but with a will to determine a course that would lead to the Chambers request and still meet all of the requirements that NextEraEnergy desires. The meeting was very well attended and so the input was significant. As such, we believe that we have now refined our request as outlined below to a degree that surely will be accepted by your firm.

We have requested a boundary change such that the north boundary of the Goshen Project be an east west line one half the distance between Sararas Road and Pepper Road and that the south boundary of the Bluewater Project be an east west line one half the distance between Danceland Road and Kippen Road with turbines known as "2", "3", "4", "7" and "10" in the Goshen Project and turbines known "6" and "31" in the Bluewater Project be allowed to exist outside of the boundary. We further requested that the exempted turbines mentioned above that are part of the Goshen Project be moved southerly on their existing property locations and that the exempted turbines mentioned above that are part of the Bluewater Project be moved northerly on their existing property locations.

Your reply did not indicate a move northerly of the south boundary of the Bluewater Project and therefore the turbines "6" and "31" are still within your project boundary. Your reply suggested that you might move the north boundary of the Goshen Project somewhat but that all of the turbines "2", "3", "4", "7" and "10" would remain within your project boundary. You also indicated that you were unwilling to consider any movement of any turbines southerly on the same property locations in the Goshen Project or consider any movement of any turbines northerly on the same property location in the Bluewaater Project.

#### Our request was reasonable, so what to do???

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. Further, in the case of the Bluewater Project, turbines known as "6" and "31" are still within the project boundaaries. As in the Goshen Project in the case of the Bluewater Project we require a letter from NextEraEnergy that states that apart from the two turbines previously mentioned, no additional wind turbines will be installed now, or in the future, within the Bluewater Project south of a line running east and west one half the distance between Danceland Road and Kippen 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 the Bluewater Project and said letter shall be included with the application for project approval from the Province of Ontario.

We are therefore offering two options, one being that has been described in our correspondence of January 24, 2012 and earlier and that which is described above. In either case we are withdrawing our request that the 7 exempted turbines mentioned above be moved, in the case of the Goshen Project,

southerly on the existing properties or in the case of the Bluewater Project, northerly on the exisitng properties. If, in addition to all of the above, NextEraEnergy decides to move any of the mentioned 5 turbines in the Goshen Project further south on the same properties or if NextEraEnergy decides to move any of the mentioned 2 turbines in the Bluewater Project further north on the same properties it will be appreciated.

If you select this offer of a letter(s) rather than a change of boundary, we would appreciate your draft version of the letter for our consideration prior to a final copy being prepared. Our next meeting of the Zurich and District Chamber of Commerce is March 19, 2012 and we would like your reponse before that date.

It is necessary to comment on some of the points and illustration made and part of your email of February 19, 2012.

- The settlerment area Boundary shown on the map included on Feb 19th is only the Ward of Zurich. Our request is and has been made on the basis of the community of Zurich which extends well beyond the Ward of Zurich in every direction but particularily to the east and west. The built up area extends hundreds of metres beyond that desribed in the map that you attached. Actually over 100 people live beyond the boundary that you have shown, over 9 businesses and institutions lie beyond the Ward and over 140 people are employed at these businesses and institutions. Therefore there is <u>not</u> the space for future development as stated in your email
- A setback of 1000 m. proposed by the Municipality of Bluewater is not the current position of the Council of Bluewater. Bluewater Council voted unanimously in support of our original request for setback. They did not agree to any turbines being exempted, ....which we offered to you in our email of January 24th, 2012.
- The Zurich and District Chamber of Commerce wishes you to be aware that future development is only one of the concerns that face this community with the proposed wind turbine projects. Proven reduced property values as a result of the proposed projects are a real concern for all property owners in our community.

From: Sent:

Dudek, Derek [Derek.Dudek@nexteraenergy.com] Tuesday, May 24, 2011 10:08 AM

Subject: RE: Set back from Highway 21

Hello there,

The project areas shown on the maps at the 2010 open house actually represent "study areas" where we will be undertaking background environmental work. Setbacks will be applied within the entirety of those study areas. The reason the Bluewater project boundary does not extend to Hwy 21, is that there is another developer active in that area closer to Hwy 21 (I believe Northland Power). The Goshen Wind Energy Centre does include the area up to Hwy 21 as part of our study area but will still require the setbacks to be applied all dwellings. Those setbacks do not appear on the maps provided at the first open house.

Thanks, and do not hestitate to contact us 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 <u>derek.dudek@nexteraenergy.com</u>

----Original Message-----

Sent: Saturday, May 21, 2011 7:45 AM To: SharedMailbox, GOSHEN-WIND Subject: Set back from Highway 21

Hello

I was at your 2010 open house. I asked why the Bluewater project was set back on the east side of Highway 21 more than the Goshen project? I believe the answer was that the drawing was not very precise(generalized?) and could be corrected.

I understand that the setback from points of reception is 550 meters.

That means that the shading for the Goshen project should be at least some distance back from the highway. Please explain why by comparison to the Bluewater project? Asking another way; why is the immediate east side of Highway 21 in the Bluewater project not in the project study area. Is this part of another unannounced project by someone else, are the leases held by someone else, are there no leases, etc?

If the Goshen project area set back from Highway 21 should be more like the Bluewater; why has the map not been updated?





Derek Dudek Community Relations Consultant NextEra Energy Canada ULC 5500 North Service Road, Suite 205 Burlington, ON L7L 6W6 via fax (905) 335-5731- 3 pages

Dear Sir:

Last week we attended the NextEra open house in Seaforth, Ontario and spoke with NextEra representatives. The open house was much more productive and respectful than the comments made by your employee Nicole Geneau at the Bluewater Council meeting a few weeks prior. If NextEra and its employees wish to conduct business with the rural residents of Huron and Bluewater counties, there needs to be a heightened element of respect from NextEra representatives towards the residents and business owners of this area. We would suggest your staff refrain from using such comments that reference perceived cultural stereotypes of the rural residents and farm business owners. Please contact us if you wish further elaboration on this issue.

Secondly, a few months ago we requested some answers from a CanAcre representative, to our questions centred around your proposed electrical transmission line infrastructure which passes by our dairy farm business on Centennial Road in the Municipality of Huron East. Specifically, we would like more written commitment from CanAcre, NextEra and Varna Wind Inc. pertaining to the mitigation each entity would undertake in order to assure us potential stray voltage from the proposed transmission lines would not occur, or, at least would be minimized to under 1 milliampere.

We have yet to hear from any representatives from CanAcre, NextEra, or Varna Wind Inc., nor have we seen any written correspondence to date.

Dairy farms are the agricultural business entities most affected by stray voltage due to the sensitivity of animals to current exposure, the opportunity for animals contact exposure in buildings where electricity is used, and typically wet conditions in confinement areas which facilitates exposure and enhances conductivity. All of these issues directly affect a cow's ability to properly ingest feed and water, recover from parturition (calving), and most importantly their ability produce milk - the staple of our business.

NextEra, CanAcre, VarnaWind Inc. and other electrical distribution companies have clearly put the cart before the horse: easement agreements and easement option agreements should only be considered after in depth, up front, factual discussions with landowners, and only upon completion of forbearance agreements with landowners raising livestock.

Specifically, forbearance agreements should pertain to ceasing of utilization of electrical distribution facilities suspect of stray voltage until the stray voltage remedy is completed such that animal contact voltage is less than 1 milliampere.

Written confirmation and commitment of electrical service quality is of utmost importance when discussing any contracts pertaining to alternate activities, in agricultural areas, such as high voltage electrical transmission and distribution, on lands where the primary source of revenue is milk, livestock or crop production. Electrical service quality is undoubtedly the number one concern of farm businesses, rural residents, and tourists throughout Southwestern Ontario. To date NextEra, CanAcre, Varna Wind Inc. and other electrical distribution and generation companies have not provided sufficient written assurance that stray voltage will be addressed effectively nor have they provided communication to the effect.

For this reason, at this time, we are not in support of your proposed transmission line project along Centennial Road in the Municipality of Huron East in the County of Huron, Province of Ontario.

We suggest a more descriptive approach when developing the easement and easement option agreements tailored to the circumstances and current primary uses of the land. We also urge you to consider and appropriately communicate with <u>ALL</u> residents surrounding the land parcels of interest to you, not unlike procedural requirements of municipalities when considering infrastructure and zoning proposals.

Our dairy farm is in the top 98th percentile in the province from a herd size and milk production measurement. Our certification within the Canadian Quality Milk (CQM) program ensures that we provide Canadians with the safest, healthiest, high quality milk possible. For years we have had extremely stringent and accurate record keeping practices in accordance with the Milk Act and the CQM program. Our levels of milk production are clearly documented in house and also with the Dairy Farmers of Ontario, our provincial milk marketing board.

Huron County is considered the "food basket" of Ontario. High quality, arable agricultural land is a scarce resource in Canada, and throughout the world. Dairy farming in the northern hemisphere requires an

CanAcre, NextEra and Varna Wind Inc. have, at minimum, a fiduciary responsibility to ensure that the proposed electrical transmission line infrastructure will in no way affect the local production levels of milk, meat or crops, including that produced by Ritzema Farms or Ritzema Dairy Ltd., if electrical transmission occurs.

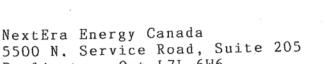
We refer you to case law *Hoffman vs. Wisconsin Electric Power Company (WEPCO)* in which the Hoffman Dairy Farm was awarded a significant 7 digit figure by the Supreme Court of Wisconsin as a result of negligence by WEPCO to deal with electrical infrastructure stray "tingle" voltage which significantly affected milk production levels year over year on the Hoffman Dairy Farm.

You are formally informed that appropriate action in our jurisdiction(s) if we deem it to be necessary.

Should you have any comments or questions regarding this letter, please contact us at the undersigned.



CC: Joe Steffler, Deputy Mayor, Municipality of Huron East Marinus Bakker, President, Huron County Federation of Agriculture Mark Wales, President, Ontario Federation of Agriculture The Honourable Lisa Thomson, MPP Huron Bruce; The Honourable Jim Bradley, Minister of the Environment



Rurlington, Ont L7L 6W6

June 5, 2012

re: Bluewater wind turbine project Municipality of Bluewater, County of Huron

Dear Sir,

In a letter dated Dec. 13, 2011 I expressed my concerns about your proposed wind turbines in my area. The issue of setbacks was addressed but the effects on property values surrounding these wind turbines was not.

I have made my property available for the study of bats and birds and frogs and so on. Also for the inspection of any gas wells. I have also witnessed van loads of people in orange vests walking over hundreds of acres, digging holes, sifting through dirt looking for god knows what. Surely your company has done studies on the effects of property values surrounding these wind turbines.

The only logical effects would be negative I'm sure you'll agree. An article in Todays Farmer dated May 1, 2012, quotes a Huron Shores realtor ( Doug Pedlar ). He said when a wind turbine is visible from a residential property it becomes much more difficult to sell, and its value can plummet anywhere from 20 to 40 percent depending on its proximity to a wind turbine. Who will compensate me for the loss of property value? NextEra Energy Canada, the Ontario Goverment, or the land owners who signed a contract with you.

I did not ask for these wind turbines. Why should I suffer the negative effects of them without being compensated in some way.

#### Respectfully



June 21, 2012



Dear

In response to your letter dated June 5, 2012, we are aware of a number of studies that been conducted with respect to property values. Based on our knowledge of available studies, there is no evidence to suggest a decline in property values from the siting of a wind farm.

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

Thank you,

VAU

Derek Dudek Community & Municipal Relations Consultant

Cc: Julia Cushing, AECOM

# **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.

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.