

No to both



Adelaide Wind Energy Centre

OPEN HOUSE COMMENT FORM

• Ailsa Craig Community Centre • 155 Annie Ada Shipley Street • North Middlesex, ON • November 10, 2011 •

Your comments will be considered. We are collecting this information to help us understand and address your concerns about the Project. Comments will become part of the public record with the exception of personal information.

1. Did the information presented tonight meet your expectations?

- Yes
- Somewhat
- No

Please explain: _____

2. If you asked questions during the Open House, did you get a satisfactory response?

- Yes
- Didn't speak to anyone
- Somewhat
- No

Please explain: _____

3. After attending the Open House, how do you feel about the Project?

- Yes
- Somewhat
- No

Please explain: _____

4. What topics would you like to learn more about? (check all that apply)

- | | |
|---|---|
| <input type="checkbox"/> Aboriginal Interests | <input type="checkbox"/> Community Partnerships |
| <input type="checkbox"/> Socio-economic | <input type="checkbox"/> Transmission |
| <input type="checkbox"/> Environment | <input type="checkbox"/> Project Details |
| <input type="checkbox"/> Human Health | |

Other: _____

Adelaide Wind Energy Centre



5. Please provide your comments or questions in the space provided below:

need people here
that have information
about what's going on

If you would like to be kept informed about the status of the Adelaide Wind Energy Project, please provide your contact information below.

Name: _____
Street Address: _____
City/Province: _____
Postal Code: _____ Email: _____

To learn more about the Project, or to send your completed comment form to us, please contact:

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

Toll Free: 1-877-257-7330
Email: Adelaide.wind@NextEraEnergy.com
Website: www.NextEraEnergyCanada.com

April 30, 2012

Dear Sir/Madam:

As you may be aware, NextEra Energy Canada was selected by the Ontario Power Authority to develop the Adelaide, Bornish and Jericho Wind Energy Centre Projects in Southwestern Ontario.

Proposed wind and renewable energy projects in Ontario must go through a formal approval process, commonly known as the Renewable Energy Approval (REA) process. Regulated by the Ministry of the Environment and the Ministry of Natural Resources, the REA process ensures that all proposed projects meet Ontario's formal Green Energy Act requirements.

As part of the REA process, we are committed to working closely with the public and communicating latest project developments on a regular basis. This is a commitment we intend to honour throughout the development, construction, operation and eventual decommissioning of our wind generation facilities. We believe this honest and open approach will ensure that we plan and develop projects in a manner that is consistent with community needs and expectations.

In keeping with this commitment, we would like to take this opportunity to update you on latest developments for the proposed Adelaide, Bornish and Jericho Wind Energy Centre Projects.

Geographical context

To provide geographical context, the Adelaide and Bornish Wind Energy Centre Projects will be located in Middlesex County and the Jericho Wind Energy Centre Project will be located in Lambton and Middlesex County. All three projects will include a common transmission line located in Middlesex County that will carry the electricity generated by the projects to the interconnection point of the provincial grid.

Transmission Line - update

On November 10, 2011, NextEra hosted a Community Update Meeting where we explained that the Adelaide, Bornish and Jericho Wind Energy Centre transmission lines will now all converge at a switching station which will be located in the Bornish Project area in North Middlesex. The projects will then share a common 115 kV transmission line to transmit the electricity to an interconnection point on the existing 500 kV Hydro One line located east of the proposed projects. This configuration will help minimize the environmental impact of the projects.

Since the Community Update Meeting, we have been working closely with the municipalities, local landowners, project engineers and biologists to identify a preferred route that takes into consideration local economic, geographic and social considerations. The final proposed transmission line routes for the Energy Centres will be presented 60-days prior to the final public meeting for the project in question.

What's next?

We will soon be starting the 60-day public consultation period for the Adelaide and Bornish projects. During this time, the draft REA documents will be made available to the public for review and comment. At end of the 60-day consultation period, NextEra will host public meetings where project representatives will be available to discuss the project and answer questions on the draft documents.

Below is a summary of the key topics discussed during the November public meeting. This summary will answer questions raised by local residents during the meeting with regard to project developments. The

responses were prepared by NextEra Energy Canada with the assistance of two consulting firms, GL Garrad Hassan and AECOM, who have been hired by NextEra Energy Canada to fulfill the requirements of O. Reg. 359/09 for the wind energy projects.

We hope this letter clarifies latest project developments and provides a sense of the direction we will be moving in over the course of summer and fall 2012 as we look to develop the Adelaide, Bornish and Jericho Wind Energy Centre Projects.

We know that there are many complex issues that require ongoing consideration and discussion and for this reason, we always welcome your feedback. If you have any additional questions, please do not hesitate to get in touch with us directly by contacting us as outlined below.

Topic	Response
<p>Stray Voltage and its Potential Effects on Livestock</p>	<p><i>Stray voltage is addressed in the Project Description Report and the Design and Operations Report.</i></p> <p>NextEra Energy Canada will design the Project to minimize the risk of stray voltage and to ensure the Project is built and maintained within acceptable levels as prescribed by the Distribution System Code and the Electrical Safety Authority</p> <p>The three NextEra Energy Canada projects that were the topic of this meeting are not proposing to connect to the local distribution system that serves barns and houses in the area, so it should not directly impact that service. However, we will continue to work closely with Hydro One to mitigate any potential impact on local distribution customers prior to construction and after, should a concern arise. As stated above, NextEra Energy Canada will use best practices and meet all applicable codes to ensure that any impacts to the system are within allowable and safe limits.</p> <p>Most cases of stray voltage occur when there is either:</p> <ul style="list-style-type: none"> ○ Improper grounding of on-site equipment at the customer location (in which case it is an issue with on-site wiring); and, ○ A change in current patterns on the distribution line, from generation or load that exposes a pre-existing condition (in which case it is an issue with the distribution utility, not with the generator or load). <p>It is important to understand that issues associated with stray voltage are not exclusively a consequence of wind energy, but rather a potential effect of any new energy project or other changes that alters the use pattern of the existing system.</p> <p>The turbines are therefore not a unique source of these problems, but like any change to the distribution system may expose faults in that system. All types of generation (wind generation using wind turbines included) must fully comply with utility requirements to ensure that the electricity they supply is compliant with grid standards.</p> <p>Stray voltage problems require on-site inspection for grounding problems, or examination of power quality issues with the distribution utility.</p>

Topic	Response
	<p>If you think you have a stray voltage problem, please contact Hydro One's Customer Communications Centre at 1-888-664-9376.</p> <p>For additional information on the potential effects of stray voltage on livestock, see the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) website: www.omafra.gov.on.ca/english/livestock/dairy/facts/strayvol.htm</p>
<p>Potential Community Benefits and</p>	<p><i>Community Benefits are addressed in the Project Description Report and the Design and Operations Report.</i></p> <p>Some of the potential community benefits include:</p> <ul style="list-style-type: none"> ○ Landowners benefit from having a guaranteed source of revenue in addition to agriculture-based, seasonal revenue for hosting a wind turbine or associated infrastructure. This helps stabilize the overall economic prosperity of the community, while allowing traditional land-use practices to continue undisturbed. ○ Municipal governments benefit as wind projects contribute to the municipal tax base while not requiring any municipal services such as water, sewer, road clearing, etc. In addition, the Projects will create between 5 and 10 full-time jobs and may result in the location of an Operations and Maintenance Centre in one of the communities to serve the project. ○ In addition to property taxes and the spinoff economic activity generated by these projects, NextEra Energy Canada, ULC (through its project subsidiaries) is working towards establishing "Community Vibrancy Funds" in host communities as part of our broader commitment to community engagement. Through this fund, NextEra Energy Canada's project companies will contribute funds that will be used to the benefit of local residents, supporting community initiatives that would otherwise not be financially feasible through the local tax base. ○ Additionally, NextEra has agreed to hire local suppliers of labour and materials, to the extent available and where competitive, for the construction and operation of the Project.
<p>Effects to Wildlife, including Birds and Bats</p>	<p><i>Effects to wildlife are addressed in the Natural Heritage Assessment Report which will be submitted to the Ministry of Natural Resources for review and sign-off.</i></p> <p>When properly sited, wind turbines present less of a danger to birds than other structures such as buildings or roads. The location of turbines, as well as numerous other decisions associated with developing our wind farms, is carefully designed to minimize these effects. As part Ontario's REA process, NextEra Energy Canada is working with experts to assess the potential effects on local wildlife, including birds and bats.</p> <p>As part of the facility siting and pre-construction activities, studies completed by independent consultants help uncover potential issues related to birds, bats and the selected site. Our work plans and results are reviewed by the Ministry of Natural Resources as part of the approval for our REA application. Biologists collect the following information on birds and bats in relation to the Project through field studies and interviews with agencies and environmental organizations:</p>

Topic	Response
	<ul style="list-style-type: none"> ○ Current use of the area, including important seasonal or specialized wildlife habitats such as migratory bird stopover and staging areas; ○ Threatened and endangered species present in the area; ○ Existing records of species in the area; ○ Bird/bat habitat; and, ○ Potential effects. <p>In addition, biologists assess any nearby wetlands and determine local permitting requirements relating to environmental protection. We avoid or minimize impacts to wetlands, a common habitat for many species of birds, and other environmentally sensitive areas during siting and layout of the Project.</p> <p>Through these efforts, our biologists can identify the:</p> <ul style="list-style-type: none"> ○ Number and type of birds/bats present in the area; ○ Behaviour of birds/bats while they are present in the area; and, ○ Possible risk to birds/bats due to turbine collision. <p>If issues are identified during the evaluation phase, we take corrective action, such as:</p> <ul style="list-style-type: none"> ○ Moving proposed turbine locations to avoid significant bird habitats or to reduce potential strikes; ○ Establishing setbacks between turbines and wetlands; and, ○ Avoiding inter-waterway flight paths or sensitive contiguous habitats for grassland birds. <p>NextEra will meet all of the requirements for conducting baseline wildlife, bird and bat studies, as described in O. Reg. 359/09 and set out in guidelines prepared by the Ministry of Natural Resources.</p> <p>Finally, the REA submission will include an Environmental Effects Monitoring Plan (EEMP) to monitor potential impacts on bird and bat species during the first three years of commercial operations. The EEMP will summarize potential negative effects; identify performance objectives with respect to the potential negative effects; describe mitigation measures to achieve the performance objectives; and commit to future monitoring to ensure the mitigation measures meet the performance objectives. NextEra will provide the monitoring results to the Ministry of Environment, Ministry of Natural Resources and any other relevant agency.</p>
<p>Independence of the Natural Heritage Assessment Report</p>	<p>The Natural Heritage Assessment Report (NHA Report) is being prepared by AECOM for the Jericho Wind Energy Centre. GL Garrad Hassan has a subconsultant, Natural Resource Solutions Inc. (NRSI), preparing the NHA Report for the Adelaide and Bornish Wind Energy Centres.</p>

Topic	Response
<p>Author</p>	<p>These consulting companies were hired by NextEra to fulfill the study requirements as outlined by the Ministry of Natural Resources.</p> <p>AECOM and NRSI are independent consulting companies with experienced terrestrial and aquatic biologists who conducted the field work and will prepare the reports in accordance with O. Reg. 359/09.</p> <p>The NHA Report is reviewed by the Ministry of Natural Resources to ensure it meets provincial requirements for conducting the necessary baseline environmental studies and identifies mitigation measures and monitoring commitments. The NHA report will be released for public review 60-days prior to the final public consultation meeting.</p>
<p>Potential Negative Effects on Local Tundra Swan Populations</p>	<p><i>Potential effects to tundra swan are assessed in the Natural Heritage Assessment Report with regard to habitat removal or disturbance at significant wildlife habitat locations.</i></p> <p>Mitigation measures and monitoring commitments are identified in the NHA submitted to the Ministry of Natural Resources for review and sign-off and also released for public review.</p> <p>NextEra is conducting ongoing consultation with organizations such as Lambton Wildlife and local landowners to identify local issues including swan stopover and staging areas. In addition, NextEra has been conducting site specific baseline environmental studies in the area since 2007. Together, this information is used to identify appropriate turbine locations including setback distances from natural features.</p>
<p>When will NextEra Present a Final Transmission Line Route?</p>	<p><i>Transmission line routes will be shown in the Project Site Plan included in the Design and Operations Report.</i></p> <p>An exact transmission line route was not presented at the Community Update Meeting because NextEra was still working with the municipality, local landowners, project engineers and biologists to identify a preferred route.</p> <p>NextEra appreciates the information received at the November 10 Community Update Meeting and takes this into account when siting the transmission line.</p> <p>The proposed transmission routes for the projects are proposed to travel from the project substations using the existing rights-of-way to a switchyard. From this switchyard, power will flow approximately 11.5 km through another 115 kV line to a new, proponent owned substation (the “second substation”), from which it will connect to Hydro One’s 500 kV transmission network.</p> <p>The final transmission line route for the projects will be presented 60-days prior to the final public meeting.</p>
<p>Potential Effects on Property Values</p>	<p>Based on available research, we are not aware of any credible evidence to indicate a decline in property values from the siting of a wind farm. Independent studies have been conducted by Ontario municipalities, leading universities, and other entities which have concluded that the construction of a wind facility does not detract from property values.</p> <p>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</p>

Topic	Response
	<p>indicate that rural residential properties realized lower sale prices than similar residential properties within the same area that were outside the viewshed of a wind turbine. No statistical interference to demonstrate that wind farms negatively affect rural residential market values in Chatham-Kent was apparent in this analysis.” http://www.canwea.ca/pdf/talkwind/PropertyValuesConsultingReportFebruary42010.pdf</p> <p>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, measureable, and statistically significant effect on home sale prices. Wind facilities have had no widespread and statistically identifiable impact on residential property values”. http://www.canwea.ca/pdf/talkwind/Property_Value_Study.pdf</p>
<p>Potential Effects on Local Views (visual effects)</p>	<p><i>Potential effects on local views are addressed in the Project Description Report and the Design and Operations Report.</i></p> <p>Visualizations of the proposed turbines within the existing landscape were prepared and presented at the public meeting for the Adelaide and Bornish projects; these will also be prepared and presented at the final public meeting for the Jericho project. These visualizations attempt to show the relative size of the turbines in relation to local landscapes. Visual effects are ultimately dependent on the perception of residents and visitors to the presence of turbines.</p>
<p>Health Concerns Related to Wind Turbines</p>	<p>NextEra takes concerns about human health very seriously. Although much has been written about health effects associated with wind turbines, we have found no credible, scientifically peer-reviewed study that demonstrates a causal link between wind turbines and negative health effects. On the contrary, the study “Wind Turbine Sound and Health Effects: An Expert Panel Review” had the following key conclusions:</p> <ol style="list-style-type: none"> 1. Sound from wind turbines does not pose a risk of hearing loss or any other adverse health effect in humans. 2. Subaudible, low frequency sound and infrasound from wind turbines do not present a risk to human health. 3. Some people may be annoyed at the presence of sound from wind turbines. Annoyance is not a pathological entity. 4. A major cause of concern about wind turbine sound is its fluctuating nature. Some may find this sound annoying, a reaction that depends primarily on personal characteristics as opposed to the intensity of the sound level. <p>The full report can be found in the Canadian Wind Energy Association’s website: www.canwea.ca/pdf/talkwind/Wind_Turbine_Sound_and_Health_Effects.pdf and on www.NextEraEnergyCanada.com.</p> <p>In their decision on the Kent Breeze Wind project in Chatham-Kent, the Ontario Ministry of Environment stated:</p> <p><i>“ The Chief Medical Officer of Health agreed to undertake a review of existing information and to consult with the Ontario Agency for Health Protection and Promotion and local medical officers of health on health effects related to wind turbines. The results of the review and</i></p>

Topic	Response
	<p><i>consultation were published on May 20, 2010 and released in a report titled “The Potential Health Impacts of Wind Turbines”. The review concluded that scientific evidence available to date does not demonstrate a direct causal link between wind turbine noise and adverse health effects. The sound level from wind turbines at common residential setbacks is not sufficient to cause hearing impairment or other direct health effects, and there is no scientific evidence to date that vibration from low frequency wind turbine noise causes adverse health effects.</i></p> <p><i>Regarding shadow flicker, a common concern is its possible relationship to epilepsy. The Chatham-Kent Board of Health reviewed potential impacts in their report dated June 2008 and stated that ‘The frequency of wind turbines is well below the current known documented threshold for triggering epilepsy symptoms.’</i></p> <p>The American Epilepsy Foundation indicated that flashing lights most likely to trigger a seizure occur at frequencies between 5 to 30 Hertz (Hz – flashes per second). Shadow flicker generated by wind turbines, however, has a frequency well below that level, and ranges from 0.5 to 1.25 Hz.</p> <p>The Massachusetts Department of Environmental Protection convened an expert panel in collaboration with the Massachusetts Department of Public Health to investigate potential human health effects associated with proximity to wind turbines. The panel, comprised of physicians and scientists, reviewed existing information within their areas of expertise and recently released a report titled Wind Turbine Health Impact Study: Report of Independent Expert Panel. Some of the key findings are summarized below:</p> <ul style="list-style-type: none"> ○ “There is no evidence for a set of health effects from exposure to wind turbines that could be characterised as “Wind Turbine Syndrome”.” ○ “Available evidence shows that the infrasound levels near wind turbines cannot impact the vestibular system” [i.e. the system responsible for balance]. ○ “None of the limited epidemiological evidence reviewed suggests an association between noise from wind turbines and pain and stiffness, diabetes, high blood pressure, tinnitus, hearing impairment, cardiovascular disease, and headache/migraine.” <p>The full report is available for review here: http://www.mass.gov/dep/energy/wind/impactstudy.htm</p> <p>The Province of Ontario has appointed Dr. Siva Sivothythaman at the University of Waterloo as the Ontario Research Chair in Renewable Energy Technologies and Health. This position is dedicated to “actively monitoring and providing the latest in scientific research and data about any possible health impacts of renewable energy.”</p> <p>Finally, NextEra will have a Complaint Resolution Process in place to address any concerns related to the Projects, should they arise. This process outlines the steps to be taken to resolve the issue including: contacting the complainant within 24 hours of receiving the complaint to understand and seek a resolution, notifying the Ministry of the Environment of the complaint and filing a Complaint Record, and finally, proposing a face-to-face meeting if the issue cannot be resolved through a phone call.</p>

Topic	Response
<p>Format of the Meeting as an Open House rather than Town Hall</p>	<p>It is our experience that meetings structured in an Open House format are the most effective way to communicate a large amount of information to members of the community. This provides local stakeholders with an opportunity to speak, face-to-face, with project staff and to ask questions that are within their areas of expertise. In addition, we understand that not all members of the public are comfortable asking questions in front of a large audience; as such, we have found that one-on-one discussions are an effective tool to encourage active participation.</p> <p>There are many subject matter experts involved in the planning, design, engineering, construction, permitting and development of a wind energy project. Should one project representative be unable to address a specific question, they can draw on the expertise of another representative at the meeting. It is NextEra's priority to provide accurate information to all attendees at the meeting.</p>

Information on the Adelaide, Bornish and Jericho Wind Energy Centres will continue to be updated and posted as the proposed Projects progress. Further information on the Projects can be found in the draft REA Reports for Adelaide and Bornish and the draft Project Description Report (PDR) for Jericho posted online at: www.NextEraEnergyCanada.com.

If you have any further questions or comments, or if you would like to set up a meeting with the Project team, please do not hesitate to contact us at 1-877-257-7330, or by email at:

- Adelaide.Wind@NextEraEnergy.com
- Bornish.Wind@NextEraEnergy.com
- Jericho.Wind@NextEraEnergy.com

Sincerely,
Kerwood Wind, Inc.

Sincerely,
Bornish Wind, LP

Sincerely,
Jericho Wind, Inc.

Ben Greenhouse
Director, NextEra Energy Canada,
ULC

Adam Camp
Project Director, NextEra Energy
Canada, ULC

Ross Groffman
Director, NextEra Energy
Canada, ULC

Adelaide telephone town hall consultation overview:

On the evening of Thursday, February 9th NextEra Energy Canada conducted a live telephone town hall regarding the Adelaide Wind Energy Centre Feed-in-Tariff application.

With use of a professional third party moderator, a telephone town hall involves proactively contacting community members by phone to inform, educate and invite participants to engage in debate with a panel of company, project and renewable energy experts. Participants are invited to ask questions and can listen to questions that other local community members ask, and the answers given by the panel.

As an initiative that is in addition to the regulated communications requirements, NextEra Energy Canada held a telephone town hall to offer access to all community members within their proposed Adelaide project. This allowed people to inquire as to any possible concerns, offer a forum to educate with accurate information, inform and update all community members, and offer each community member direct contact information for future follow up.

On February 9th, 2012, every available phone number in Strathroy, Adelaide Metcalfe, Parkhill and Ailsa Craig was called and community members were invited to participate in a live telephone town hall with experts representing NextEra Energy Canada.

The panel included the Adelaide Wind Energy Project Director, NextEra Energy Canada's construction manager, environmental services manager, community outreach liaison, a sound expert, terrestrial and wetlands biologist and an environmental health issues expert.

In total, 2,960 outbound calls were placed in the four above mentioned communities making up the geographic area of the Adelaide Wind Energy Centre application. 1,346 community members participated and stayed on the line for one minute or longer. The peak participation was 286 participants and the average length of stay on the phone for telephone town hall participants was 20 minutes.

During the 51minute telephone town hall, 19 participants opted to enter the queue to be screened to ask a live question. 16 people were screened and 15 participants went live to ask a question of the panel. Call statistics include:

Total attendees	Average attendance	Peak attendance	Entered queue	Screened	Asked live question
1346	20 minutes	286	19	16	15

During the call, live community participants asked fifteen questions, and were given answers in real time. As well, one person left a voice message and was contacted after the telephone town hall with an answer to their question.

This event sought to supplement and add insight to the existing Open House events as well as provide community members with the opportunity to participate in a group forum if they were otherwise unable to attend an Open House in person.

Stakeholder engagement overview:

NextEra Energy Canada created a list of groups, organizations and associations that have an interest in the issues surrounding wind, wind production and renewable energy. These interests include health, community relations, economic prosperity, and real estate.

NextEra Energy Canada proactively reached out to a number of professional groups, organizations and associations to explain their application, their process, projects, answer questions and support these groups with any needs they may have had with regards to wind and renewable energy.

The purpose of these meetings was to offer introductions, educate, inform and engage in debate. As well, NextEra spoke directly to any concerns and continues to keep all lines of communication open with these relationships.

As a result of these meetings, many organizations have declared their support for wind energy in Ontario.

In some cases, NextEra Energy Canada answered questions and was able to accurately address inaccurate assumptions or misinformation, and in other cases several organizations proactively decided to publicly draft opinion letters to voice their support for wind and renewable energy.

Landowner engagement overview:

Landowners are an important group in our process, as they have agreed to sign up to NextEra Energy Canada's program and will house infrastructure on their property. NextEra Energy Canada has been open with their landowners and has always answered all questions in a timely fashion. In many cases, landowners wished to show public support for wind and address misinformation, and would write letters to the editor in support of wind energy in Ontario.

May 7, 2012

Fran Urbshott, Clerk/Administrator/Treasurer
Township of Adelaide-Metcalfe
2340 Egremont Drive - RR #5
Strathroy, Ontario
N7G 3H6

Subject: Adelaide Wind Energy Centre – Public Consultation Review

Dear Ms. Urbshott,

Kerwood Wind, Inc. is proposing to develop the Adelaide Wind Energy Centre (the “Project”). Kerwood Wind, Inc. is a wholly-owned subsidiary of NextEra Energy Canada, ULC (NextEra). The parent company of NextEra Energy Canada, ULC, is NextEra Energy Resources, LLC, with a current portfolio of nearly 8,500 operating wind turbines across North America. The Project is located in the Township of Adelaide-Metcalfe and North Middlesex and is proposed to consist of 37, 1.62 MW turbines with a total nameplate capacity of up to 59.9 MW, though 38 turbine positions will be permitted.

NextEra is pleased to submit the enclosed DRAFT REA documents (listed on the back of this page), Shadow Flicker Report, Turbine Visualizations and Plain Language Summaries. We ask that you make them available at the municipal office for public review on May 9, 2012. This initiates the 60-day Public Review Period under Ontario Regulation 359/09.

Please also find enclosed a Notice for the upcoming Public Meeting to take place at the Aisla Craig Community Centre and the Adelaide W.G. MacDonald Public School, on July 11 and 12 respectively.

Please do not hesitate to contact myself or Derek Dudek (Derek.Dudek@nexteraenergy.com) should you have any questions.

Yours very truly,



Thomas Bird,
Environmental Services Project Manager

C.c. Derek Dudek, NextEra Energy Canada,

Enclosures:

One hard copy of the following DRAFT REA Reports:

- Project Description Report
- Construction Plan Report
- Design and Operations Report
- Decommissioning Plan Report
- Wind Turbine Specification Report
- Natural Heritage Assessment Report
- Water Assessment and Water Body Report
- Cultural Heritage Assessment Report
- Stage 1 and Stage 2 Archaeological Assessment Report

Two copies of the Plain Language Summaries

Shadow Flicker Report

Turbine Visualizations

Public Meeting Notice

May 7, 2012

Kathy Bunting, Clerk, c/o Sabrina Langill
Middlesex County Administration Office
399 Ridout Street North
London, Ontario
N6A 2P1

Subject: Adelaide Wind Energy Centre – Public Consultation Review

Dear Ms. Bunting,

Kerwood Wind, Inc. is proposing to develop the Adelaide Wind Energy Centre (the “Project”). Kerwood Wind, Inc. is a wholly-owned subsidiary of NextEra Energy Canada, ULC (NextEra). The parent company of NextEra Energy Canada, ULC, is NextEra Energy Resources, LLC, with a current portfolio of nearly 8,500 operating wind turbines across North America. The Project is located in the Township of Adelaide-Metcalf and North Middlesex and is proposed to consist of 37, 1.62 MW turbines with a total nameplate capacity of up to 59.9 MW, though 38 turbine positions will be permitted.

NextEra is pleased to submit the enclosed DRAFT REA documents (listed on the back of this page), Shadow Flicker Report, Turbine Visualizations and Plain Language Summaries. We ask that you make them available at the municipal office for public review on May 9, 2012. This initiates the 60-day Public Review Period under Ontario Regulation 359/09.

Please also find enclosed a Notice for the upcoming Public Meeting to take place at the Aisla Craig Community Centre and the Adelaide W.G. MacDonald Public School, on July 11 and 12 respectively.

Please do not hesitate to contact myself or Derek Dudek (Derek.Dudek@nexteraenergy.com) should you have any questions.

Yours very truly,



Thomas Bird,
Environmental Services Project Manager

C.c. Derek Dudek, NextEra Energy Canada,

Enclosures:

One hard copy of the following DRAFT REA Reports:

- Project Description Report
- Construction Plan Report
- Design and Operations Report
- Decommissioning Plan Report
- Wind Turbine Specification Report
- Natural Heritage Assessment Report
- Water Assessment and Water Body Report
- Cultural Heritage Assessment Report
- Stage 1 and Stage 2 Archaeological Assessment Report

Two copies of the Plain Language Summaries
Shadow Flicker Report
Turbine Visualizations
Public Meeting Notice

May 7, 2012

Linda Creaghe, CAO
Municipality of North Middlesex
229 Parkhill Main Street, PO Box 9
Parkhill, Ontario
N0M 2K0

Subject: Adelaide Wind Energy Centre – Public Consultation Review

Dear Ms. Creaghe,

Kerwood Wind, Inc. is proposing to develop the Adelaide Wind Energy Centre (the “Project”). Kerwood Wind, Inc. is a wholly-owned subsidiary of NextEra Energy Canada, ULC (NextEra). The parent company of NextEra Energy Canada, ULC, is NextEra Energy Resources, LLC, with a current portfolio of nearly 8,500 operating wind turbines across North America. The Project is located in the Township of Adelaide-Metcalf and North Middlesex and is proposed to consist of 37, 1.62 MW turbines with a total nameplate capacity of up to 59.9 MW, though 38 turbine positions will be permitted.

NextEra is pleased to submit the enclosed DRAFT REA documents (listed on the back of this page), Shadow Flicker Report, Turbine Visualizations and Plain Language Summaries. We ask that you make them available at the municipal office for public review on May 9, 2012. This initiates the 60-day Public Review Period under Ontario Regulation 359/09.

Please also find enclosed a Notice for the upcoming Public Meeting to take place at the Aisla Craig Community Centre and the Adelaide W.G. MacDonald Public School, on July 11 and 12 respectively.

Please do not hesitate to contact myself or Derek Dudek (Derek.Dudek@nexteraenergy.com) should you have any questions.

Yours very truly,



Thomas Bird,
Environmental Services Project Manager

C.c. Derek Dudek, NextEra Energy Canada,

Enclosures:

One hard copy of the following DRAFT REA Reports:

- Project Description Report
- Construction Plan Report
- Design and Operations Report
- Decommissioning Plan Report
- Wind Turbine Specification Report
- Natural Heritage Assessment Report
- Water Assessment and Water Body Report
- Cultural Heritage Assessment Report
- Stage 1 and Stage 2 Archaeological Assessment Report

Two copies of the Plain Language Summaries
Shadow Flicker Report
Turbine Visualizations
Public Meeting Notice

Welcome!

NextEra Energy Canada welcomes you to tonight's event.

We are here to:

- ✦ Provide information about NextEra Energy Canada
- ✦ Describe the projects
- ✦ Provide you with information on the Renewable Energy Approvals process
- ✦ Listen to your concerns and answer your questions
- ✦ Present the proposed Wind Energy Centre layout
- ✦ Receive your comments about the project and study results
- ✦ Make the draft REA reports and studies available to you



WIND ENERGY CENTRE - OPEN HOUSE

A Leader in Clean Energy

NextEra Energy Canada is an indirect, wholly-owned subsidiary of NextEra Energy Resources. NextEra Energy Resources, LLC is the largest generator of wind energy in North America.

NextEra Energy Canada

NextEra Energy Canada is a leading renewable energy developer in Canada focused on developing electricity derived from clean, renewable sources. Our Canadian operations are headquartered in Burlington, Ontario. We are the owner and operator of four wind energy projects and two solar energy projects in the following provinces:

- ✦ Quebec: Mount Copper and Mount Miller Wind Energy Centres
- ✦ Nova Scotia: Pubnico Point Wind Energy Centre
- ✦ Alberta: Ghost Pine Wind Energy Centre
- ✦ Ontario: Sombra and Moore Solar Energy Centres

NextEra Energy Canada is currently working toward approval of six wind energy centres in Ontario. We currently have two projects that received Renewable Energy Approval (REA).

NextEra Energy Resources

We are:

- ✦ The operator of 90 wind projects in 18 states and three provinces with nearly 9,000 wind turbines providing over 8,700 megawatts of generation
- ✦ The second largest global generator of renewable energy
- ✦ The largest generator of both wind and solar power in North America operating wind energy facilities for over 23 years

Did you know that NextEra Energy Resources...

- ✦ Began developing renewable energy projects in 1989?
- ✦ Has approximately 4,500 employees in North America?
- ✦ Generates approximately 95% of its electricity from clean or renewable sources?

WIND ENERGY CENTRE - OPEN HOUSE

TCI Renewables

- ✦ TCI Renewables, Ltd is a leading independent renewable energy business. Air Energy TCI (AET) was established in 2006 as the North American subsidiary of TCI Renewables Ltd.
- ✦ TCI Renewables Ltd has offices in Great Britain, Ireland and Canada with interests in over 30 wind power development projects
- ✦ AET is our Canadian company, whose head office is based in Montreal.

The NextEra Energy Canada and AET Partnership

- ✦ Air Energy TCI Inc (AET) entered into an agreement with NextEra Energy Canada, ULC regarding the Adelaide Wind Energy project in 2009.
- ✦ The agreement between the two companies is an outcome of AET's recent strategic evaluation of how best to advance the Adelaide Wind Energy project to construction.
- ✦ NextEra Energy purchased all rights to the Adelaide Wind Energy project from AET. NextEra Energy Canada will be the owner and operator of the project.



renewables

WIND ENERGY CENTRE - OPEN HOUSE

Why is Southwestern Ontario considered a great choice for wind energy?

Wind developers favour Southwestern Ontario for two main reasons:

1. Strong and consistent wind levels, particularly around the Great Lakes
2. Available and adjacent electricity transmission
 - ✦ Wind data has been collected in the Project Study Area since 2007 measuring wind speeds at heights of 40 metres (131 feet), 50 metres (164 feet), and 60 metres (197 feet)
 - ✦ Wind speeds are viable for commercial wind energy generation
 - ✦ The region is well served by existing and planned transmission lines (such as Hydro One's Bruce to Milton line) that have available capacity to receive the electricity generated by the project



WIND ENERGY CENTRE - OPEN HOUSE

Benefits of Wind Power

Environmental Compatibility

- ✦ Creates no air or water pollution
- ✦ Minimal greenhouse gas emissions
- ✦ Efficient and reliable
- ✦ Allows land to remain in agricultural use
- ✦ Does not use water in power generation
- ✦ Low environmental impact
- ✦ Free, renewable energy source

Local Economic Benefits

- ✦ Provides new employment opportunities
- ✦ Adds tax base to the local municipalities
- ✦ Supports the economy through purchases of regional goods and services
- ✦ 8-10 full time jobs
- ✦ 200-300 construction jobs
- ✦ Delivers landowner lease payments
- ✦ Community Vibrancy Funds to support local initiatives

Over the next 20 years, we estimate the project will contribute:

- ✦ \$90 million in corporate income tax
- ✦ \$14 million in property tax revenue to Middlesex County
- ✦ \$17 million in landowner payments

Price Stability

- ✦ Decentralizes power production
- ✦ No fuel cost
- ✦ Helps stabilize the cost of power
- ✦ Electricity produced domestically



WIND ENERGY CENTRE - OPEN HOUSE

Ontario's Renewable Energy Approval Process

- The Renewable Energy Approval (REA) process, outlined in Ontario Regulation 359/09, is a requirement for large wind power projects under Ontario's Green Energy Act
- NextEra Energy Canada will submit a Renewable Energy Approval application to the Ontario Ministry of the Environment (MOE) for each project
- The MOE will assess the application for completeness and then undertake a technical review to determine whether to issue an approval
- Other agencies, including the Ministry of Natural Resources (MNR), the Ministry of Transportation (MTO), the Ministry of Tourism, Culture and Sport (MTCS) and local conservation authorities and municipalities will provide input

Reports included in application:

- ✦ **Project Description Report** – to provide an overview of the project and a summary of all the required REA reports
- ✦ **Archaeology and Cultural Heritage Assessment Reports** – to identify potential effects on archaeological or cultural heritage resources
- ✦ **Natural Heritage Assessment Report** – to identify potential effects on birds, bats, other wildlife, woodlands, wetlands, areas of natural and scientific interest, etc.
- ✦ **Noise Study Report** – to ensure the project is in compliance with noise regulations
- ✦ **Water Body and Water Assessment Report** – to identify potential effects on streams, seepage areas and lakes
- ✦ **Construction Plan, Design and Operation, Decommissioning Reports** – to describe these activities and identify any potential effects resulting from the various project phases
- ✦ **Consultation Report** – to demonstrate how NextEra Energy Canada engaged local and Aboriginal governments, as well as the public, during the project
- ✦ **Wind Turbine Specifications** – to describe the turbine technology selected for the project

WIND ENERGY CENTRE - OPEN HOUSE

Renewable Energy in Ontario

The Green Energy and Green Economy Act

- Developed to stimulate the “green” economy in Ontario and create up to 50,000 jobs

Key Components:

- Provincial obligation to purchase green energy
- Priority grid access for renewable energy projects
- Long-term fixed-price power contracts
- Coordinated regulatory and approvals process



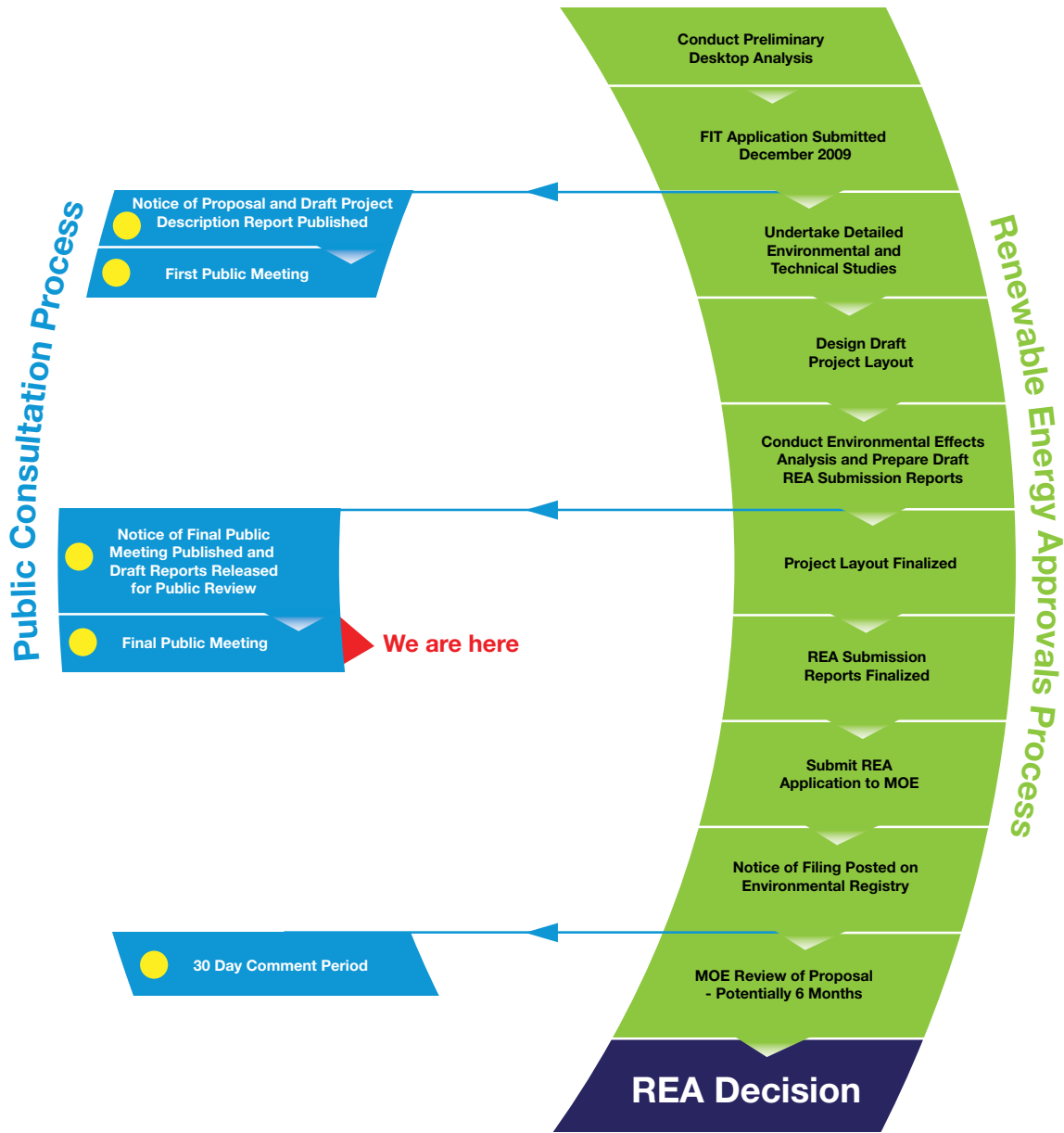
Provincial Green Energy Initiatives and the Feed-in-Tariff Program:

- Feed-in-Tariff (FIT) Program, launched by the Ontario Power Authority, is North America's first comprehensive guaranteed pricing structure for renewable electricity production
- The FIT Program offers stable prices and long-term contracts to green energy projects that encourage investment in renewable energy and economic development across the Province
- NextEra Energy Canada had six projects that were awarded FIT contracts on July 4, 2011:
 - ✦ Adelaide Wind Energy Centre
 - ✦ Bluewater Wind Energy Centre
 - ✦ Bornish Wind Energy Centre
 - ✦ East Durham Wind Energy Centre
 - ✦ Goshen Wind Energy Centre
 - ✦ Jericho Wind Energy Centre

We have two additional projects (Conestogo and Summerhaven Wind Energy Centres) which have been awarded a FIT contract by the Ontario Power Authority and have received the Renewable Energy Approval.

WIND ENERGY CENTRE - OPEN HOUSE

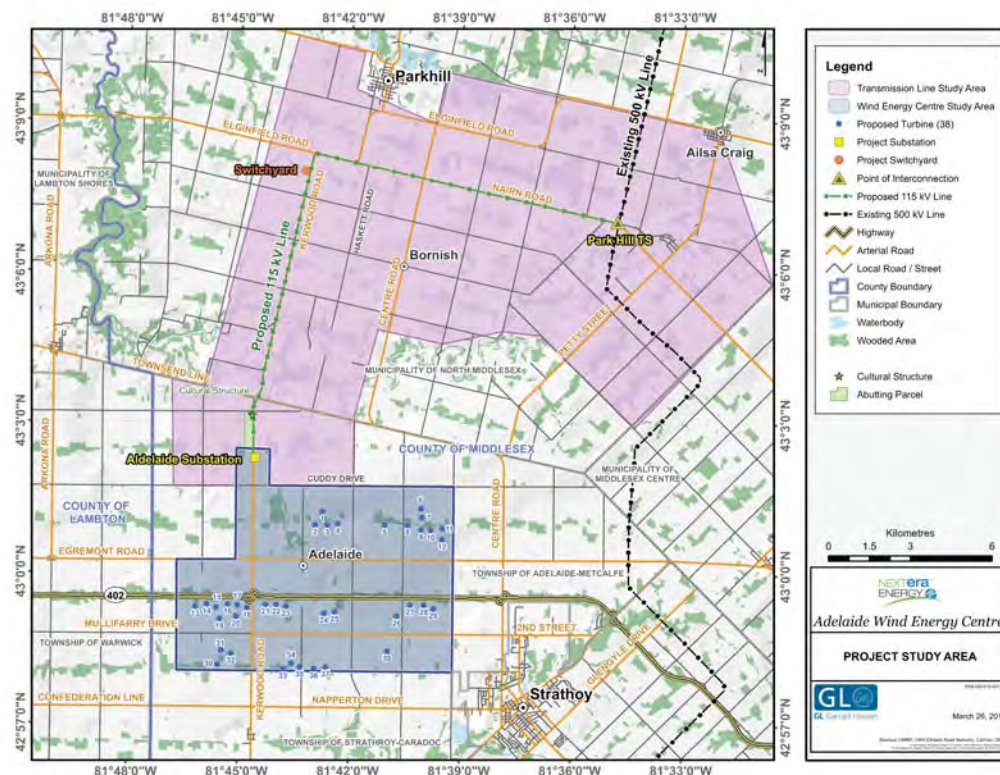
Renewable Energy Approval Process



WIND ENERGY CENTRE - OPEN HOUSE

The Adelaide Project

- The proposed Adelaide Wind Energy Centre is planned to be located in the Municipality of North Middlesex, Middlesex County, Ontario
- Project components will be installed on privately-owned agricultural lots
- The project will have a maximum name plate capacity of 59.90 - megawatts of electricity which will generate enough energy to power approximately 15,000 homes
- Project infrastructure will include:
 - ✦ 37, 1.6 - megawatt GE turbines, though 38 turbine location will be permitted
 - ✦ Laydown and storage areas (including temporary staging areas) for construction equipment and supplies
 - ✦ A substation located on site and a 115 kV transmission line to connect to the Hydro One transmission system
 - ✦ The proposed transmission line will travel north along Kerwood Road and east along Elginfield and Nairn Roads, connecting to the Hydro One transmission system
 - ✦ Underground electrical collection lines (located on private lands and municipal right of ways) to connect the turbines to the transformer substation
 - ✦ Turbine access for road construction and maintenance
 - ✦ An operations and maintenance building



WIND ENERGY CENTRE - OPEN HOUSE

Your Concerns... Our Response

Q: What is stray voltage?

A: Stray voltage results from the normal delivery and/or use of electricity - usually smaller than 10 volts - that may be present between two conductive surfaces. Stray voltage is related to power system faults and is generally not considered hazardous.

Q: Do wind turbines cause stray voltage?

A: No. Wind energy has been incorrectly associated with stray voltage because wind turbines are often installed in agricultural areas. Stray voltage is not a consequence of wind energy but rather changes in the use pattern of the existing electrical system.

Wind turbines are not the root of the problem, but the addition of this or any other generation source may expose faults in that system. All types of generation, including wind generation, must fully comply with utility requirements to ensure that the electricity they supply is compliant with grid standards.

Stray voltage problems require on-site inspection to avoid grounding problems and to examine power quality issues with the distribution utility.

Q: What is being done to minimize stray voltage across these transmission lines?

A: NextEra Energy Canada will adopt industry best practices at all times to minimize the risk of stray voltage and ensure our projects are built and maintained within acceptable levels as prescribed by the local safety code.

While NextEra Energy Canada does not intend to connect Wind Energy Centres to the local distribution system that serves barns and houses in the area, we are aware that transmission lines in close proximity to local distribution lines can induce current on the distribution lines if not designed properly. To address this, we are already working closely with Hydro One to minimize the impact on local distribution customers.

Q: What effects will there be on wildlife? (e.g. birds, bats etc)

A: When properly sited, wind turbines present less of a danger to wildlife than other structures such as buildings and roads. Turbines will be located as carefully as possible to minimize any effects on wildlife. NextEra Energy Canada will work closely with the relevant experts to assess any potential effects on wildlife, including birds and bats.

WIND ENERGY CENTRE - OPEN HOUSE

Your Concerns... Our Response

Q: Why not use an open concept meeting approach where all attending can hear the presentation as well as the questions and answers?

A: It is our experience that meetings structured in an Open House format are the most effective way to communicate a large amount of information to members of the community. This provides local stakeholders with an opportunity to speak face-to-face, with project staff and to ask questions that are within their areas of expertise. In addition, we understand that not all members of the public are comfortable asking questions in front of a large audience; as such, we have found that one-on-one discussions are an effective tool to encourage active participation.

There are many subject matter experts involved in the planning, design, engineering, construction, permitting and development of a wind energy project. Should one project representative be unable to address a specific question, they can draw on the expertise of another representative at the meeting. It is NextEra's priority to provide accurate information to all attendees at the meeting.

Q: What risks are there to my health from turbines?

A: There is little credible evidence to support any links between wind turbines and adverse effects on human health either related to noise or shadow flicker. NextEra will have a Complaint Resolution Process in place to address any concerns related to the project that may arise.

Q: I am concerned about the effect on the value of my property.

A: Based on available research, we are not aware of any credible evidence to indicate a decline in property values from the siting of a wind farm.

Q: I have concerns about the impact on the landscape from the turbines.

A: The visual impact of any development is highly subjective. Through our consultation we will present visualizations of our proposed development for public comment and feedback that may result in changes that would make the development more visually appealing.

For a complete list of comments and questions from the public, please visit the Frequently Asked Questions sections on our website. We will also publish concerns and inquiries in the public consultation report, which will be filed with the REA documents and posted on our website.



Aboriginal Consultation

- Canada's Constitution Act, 1982, recognizes the rights of Aboriginal peoples (First Nation, Inuit and Métis)
- Ontario Regulation 359/09 has specific requirements for Aboriginal consultation
- Ontario Power Authority's Feed in Tariff program reinforces the importance of Aboriginal consultation
- Project proponents are delegated the "procedural aspects" of Aboriginal consultation
- Aboriginal consultation may include environmental, archaeological, cultural and spiritual issues
- NextEra Energy Canada is working closely with Aboriginal communities and leadership as required by law and good practice to:
 - Offer meaningful information about its projects
 - Seek information that helps ensure good planning to avoid or minimize impacts
 - Openly discuss issues, interests and concerns
 - Seek workable and mutually acceptable solutions
 - Foster relationships of mutual respect

WIND ENERGY CENTRE - OPEN HOUSE

Turbine Siting Process

Developing a Site Plan

The following steps outline the process of developing a project site plan:

1. Identify a sufficient wind resource and study the wind characteristic for several consecutive years
2. Work with local landowners to option land for wind turbines and ancillary facilities (i.e. collection lines and access roads)
3. Identify technical and environmental limitations based on input from project engineers, ecologists and aquatic biologists, cultural experts, local landowners, Aboriginal groups, and government agencies
4. Identify locations to site project infrastructure by balancing these technical and environmental limitations while adhering to the setback distances prescribed by the Province (i.e., Ontario Regulation 359/09) as identified in **Table 1** below. Project components can be sited within the setbacks for some environmental features provided that an Environmental Impact Study is completed and mitigation measures identified.

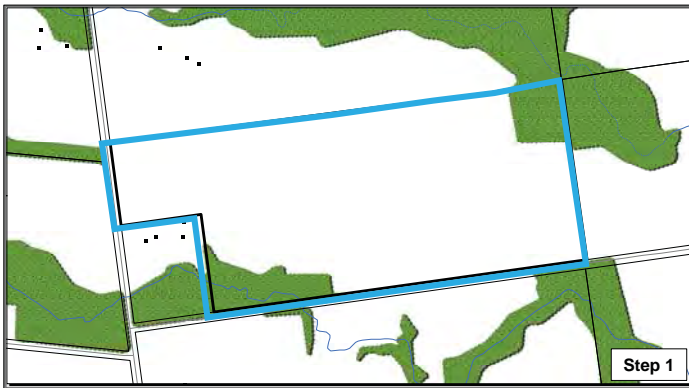
Table 1. Turbine Siting Process Constraint Categories

Category	Distance Considerations*
Natural Heritage Features	<ul style="list-style-type: none">• Area of Natural and Scientific Interest (ANSI) earth Science: 50m• ANSI Life Science: 120m• Significant wildlife Habitat: 120m• Significant Woodlands and Valleylands: 120m• Provincially Significant Wetland
Aquatic Features	<ul style="list-style-type: none">• Streams and Waterbodies: 30m
Local Infrastructure	<ul style="list-style-type: none">• Petroleum Resource Facilities: 75• Road Right-of-way: 60m• Railway right-of-way: 60m
Socio-Economic	<ul style="list-style-type: none">• Property Line: 60m• Residential and other uses sensitive to noise: 550m

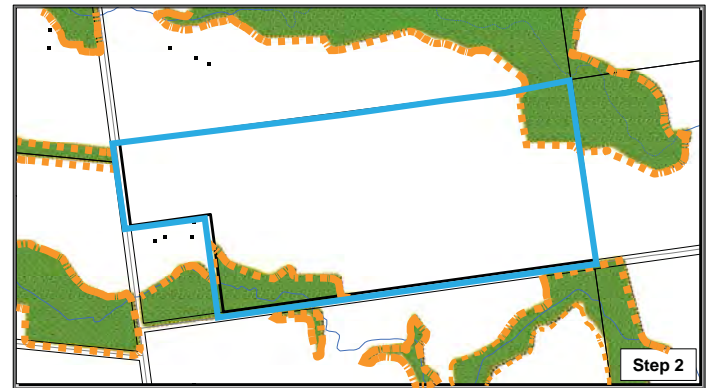
* Note that other requirements may be applicable to the projects (e.g. aerodromes, pipelines, and Ministry of Transportation setbacks, etc.)

WIND ENERGY CENTRE - OPEN HOUSE

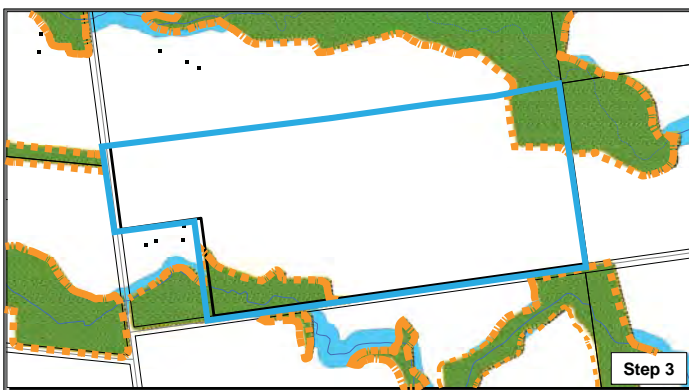
Turbine Siting Process



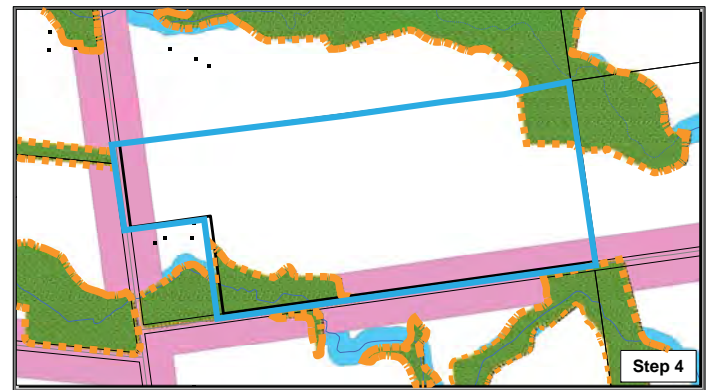
✦ Step 1: Work with local landowners to option land



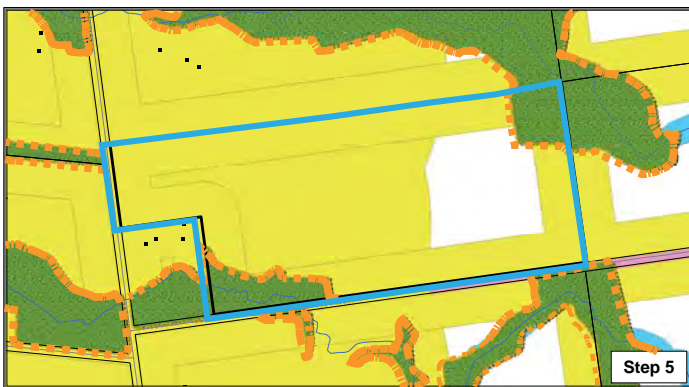
✦ Step 2: Identify environmental limitations



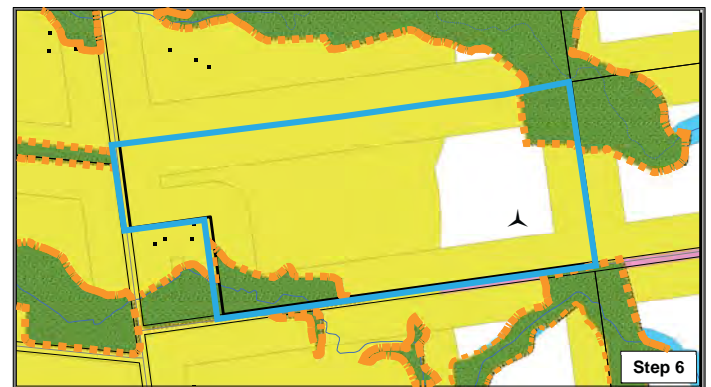
✦ Step 3: Identify aquatic limitations



✦ Step 4: Identify local infrastructure limitations



✦ Step 5: Identify socio-economic limitations



✦ Step 6: Site turbine within remaining land available

Legend

<ul style="list-style-type: none"> ✦ Turbine Location Terrestrial Features ■ Woodlots Aquatic Features ■ Waterbody 	<ul style="list-style-type: none"> ■ Socio-Economic ■ Noise Receptor — Local Infrastructure — Major Road 	<ul style="list-style-type: none"> Setback ■ Terrestrial Setback ■ Aquatic Setback ■ Local Infrastructure Setback ■ Socio-Economic Setback
---	--	--

WIND ENERGY CENTRE - OPEN HOUSE

Construction Plan

Turbine siting and surveys

- ✦ Site preparation will include final turbine siting and surveys
- ✦ During these surveys, boundaries of turbine sites will be staked and existing buried infrastructure will be located and marked

Access roads

- ✦ Municipal and Provincial roads will be used to transport equipment to the construction sites
- ✦ Minor modifications may be required to some of the existing roads (e.g. widening the turning radius) to transport equipment
- ✦ New access roads will typically be 10 m (34 feet) wide during the construction phase
- ✦ No permanent paved roads will need to be constructed for the turbines
- ✦ Equipment will be delivered by truck and trailer as needed throughout the construction phase and stored at temporary laydown sites surrounding each turbine



WIND ENERGY CENTRE - OPEN HOUSE

Construction Plan

Electrical Collector System:

- ✦ This system consists of a mixture of underground cables, pad mounted transformers and a substation
- ✦ Ploughing and trenching will be used to install the underground cables
- ✦ The cabling will be buried at a depth that will not interfere with normal agricultural practices and maps of cable locations will be provided to landowners

Wind Turbines:

- ✦ Foundations will be made of poured concrete, reinforced with steel rebar to provide strength
- ✦ Each foundation will require an excavation of approximately 3 metres (10 feet) deep, and 20 metres (66 feet) by 20 metres (66 feet) square
- ✦ Only the tower base portion of the foundation will be left above ground
- ✦ The turbine will then be anchored to the foundation by large bolts set in the concrete foundation
- ✦ Turbine assembly and installation will typically require 4 - 5 days per turbine
- ✦ Following commissioning, the area surrounding the turbine will be returned to its pre-construction state

Operations and Maintenance Building:

- ✦ This building will be used to monitor the day-to-day operations of the wind farm and maintenance effort. Preferably, an existing building will be obtained for this purpose; otherwise, a new building will be constructed on privately held lands
- ✦ Potable water will be supplied by a well or through the municipal water system and if required, a septic bed will be constructed for the disposal of sewage
- ✦ These elements will be constructed in accordance with applicable municipal and provincial standards



WIND ENERGY CENTRE - OPEN HOUSE

Construction Plan

- A construction plan has been developed to detail all the activities that are part of the Project's construction phase. This plan includes details of any potential effects, the appropriate mitigation measures and ongoing monitoring commitments.
- The schedule below shows the anticipated construction schedule for the Project. Construction is expected to start in late summer/early fall 2013 and last for 6 months.

(Activity)	MO	M1	M2	M3	M4	M5	M6
Surveying (prior to construction)	●						
Geotechnical Sampling (prior to construction)	●						
Land Clearing and Construction of Access Roads		●	●				
Temporary Crane Paths			●				
Installation of Culverts		●					
Construction of Laydown Area			●				
Turbine Site and Crane Pad Construction		●	●	●			
Delivery of Equipment		●	●	●	●	●	●
Construction of Turbine Foundations				●			
Wind Turbine Assembly and Installation				●	●	●	●
Construction of Electrical Collector System						●	●
Construction of Transformer Substation					●	●	●
Construction of Operations Building						●	●
Land clean up and Reclamation		●	●	●	●	●	●
Turbine Commissioning							●

WIND ENERGY CENTRE - OPEN HOUSE

Transmission Line

Transmission line - Why is it needed?

- Deliver clean energy to the Ontario system operator to reduce the use of fossil fuel generated electricity by Ontarians.
- System studies indicate there is ample capacity at this point of interconnection without significant network upgrades.
- Investment in transmission infrastructure is needed in Ontario. The plan places no additional burden on our aging infrastructure or Ontario ratepayers.



WIND ENERGY CENTRE - OPEN HOUSE

Transmission Route Overview

- NextEra Energy Canada will build a 115 kV electrical transmission line from the step-up transformer station to the connection point with the Provincial electricity grid.
- The transmission line will be located on private property or within existing road rights-of-way.
- The electricity collected via the 34.5 kV underground collection lines will converge at the transformer substation where the electricity will be “stepped-up” to 115 kV for transmission and then routed to a switchyard.
- The switchyard will occupy 2-3 hectares and is common to three of NextEra’s Wind Energy Centres (i.e. Bornish, Adelaide, and Jericho).
- The switchyard will collect power from the three Wind Energy Centres and will deliver the electricity to a second substation where the electricity will be “stepped up” to 500 kV at the point of interconnect with the existing Hydro One transmission line.

Selecting a Transmission Route

- Distance between the transmission line and existing structures is considered when selecting a route.
- Easement widths located on private property will vary between 33 - 200 feet (10 - 60 metres). Widths vary due to special features on a particular parcel.
- Existing land uses and the location of environmentally sensitive features are considered when choosing a route.

Land Owners and Easement Agreements

- NextEra Energy Canada is committed to working with landowners within the transmission corridor to find a mutually acceptable route for the transmission line.

WIND ENERGY CENTRE - OPEN HOUSE

Construction of a Transmission System

The construction of the transmission system is being considered on municipal rights of way, private lands or a combination of both within the transmission study area.

- Transmission structures will typically be single poles made of metal, wood, or concrete.
- Poles will be approximately 18 – 27 metres (60 - 90 feet) in height. The transmission line will be mounted on existing or new hydro poles.
- A typical span between poles will be 91 – 182 metres (300 - 600 feet).
- Wherever practical, transmission and distribution will be co-located on a single pole.
- Transmission lines must be constructed to standards outlined by the Province and/or electrical codes.

Transmission Approvals Process

- Transmission lines (lines with voltages higher than 50 kV) that are longer than 2km require a Leave to Construct from the Ontario Energy Board.
- This process examines the need for the line and the proposed routing to ensure that the priorities given to the Ontario Energy Board by the government are met.
- The line is also permitted as part of the Renewable Energy Approval (REA) process.
- Natural heritage and archaeological studies are being conducted along proposed routes within the transmission study area including:
 - ✦ Vegetation studies
 - ✦ Aquatic habitat assessments; and
 - ✦ Birds, bat and wildlife studies
- Any additional studies that may be required as a result of route selection will be conducted prior to construction.

WIND ENERGY CENTRE - OPEN HOUSE

Operations and Maintenance

NextEra Energy believes in “prevention” versus “event response” through component condition and performance assessment

- ✦ Experienced operations and maintenance managers on site
- ✦ On-going training and mentoring programs to maintain safe and efficient operation
- ✦ Site staff supported by centralized maintenance and environmental staff
- ✦ Supported by 24/7 Fleet Performance and Diagnostic Centre
- ✦ Local operations team available to answer questions and address concerns



WIND ENERGY CENTRE - OPEN HOUSE

Decommissioning

- The anticipated life of the project is approximately 30 years. Decommissioning of the turbines will occur following the operations phase. A plan has been developed to dismantle or decommission the Project and to restore the land and manage excess water or waste.
- Decommissioning will be done in accordance with the Ontario Health and Safety Act and any applicable municipal, provincial and federal regulations and standards.
- The following components will be removed during dismantling:
 - 1. Turbines;**
 - 2. Overhead lines and poles; and**
 - 3. Transformer substations.**

Restoration of land and water

- All areas, including the access roads, transformer pads and crane pads will be restored as much as practical to their original condition with native soils and seeding in consultation with the landowner.
- There is the option for turbines to be “re-powered”, meaning that components could be replaced to extend the life of the Project and delay decommissioning. This is optional, and turbines may still be decommissioned.



WIND ENERGY CENTRE - OPEN HOUSE

Health and Wind Turbines

- Public health and safety will be considered during all stages of the Project.
- Many studies have been conducted world-wide to examine the relationship between wind turbines and possible human health effects.
- In Ontario “Ontario doctors, nurses, and other health professionals support energy conservation combined with wind and solar power – to help us move away from coal”

Ontario College of Family Physicians, Registered Nurses Association of Ontario, Canadian Association of Physicians for the Environment, Physicians for Global Survival, the Asthma Society of Canada, and the Lung Association

- In “The Potential Health Impact of Wind Turbines” (May 2010), Ontario’s Chief Medical Officer of Health examined the scientific literature related to wind turbines and public health, considering potential effects, such as dizziness, headaches, and sleep disturbance. The report concluded that:
 - ✦ “...the scientific evidence available to date does not demonstrate a direct causal link between wind turbine noise and adverse health effects. The sound level from wind turbines at common residential setbacks is not sufficient to cause hearing impairment or other direct health effects, although some people may find it annoying.”
 - ✦ The report also concluded that low frequency sound and infrasound from current generation upwind model turbines are well below the pressure sound levels at which known health effects occur. Further, the report states that there is no scientific evidence to date that vibration from low frequency wind turbine noise causes adverse health effects.
- Overall, health and medical agencies agree that sound from wind turbines is not loud enough to cause hearing impairment and is not causally related to adverse effects.*
- Scientists and medical experts around the world continue to publish research in this area. Through our health consultants, NextEra is committed to staying informed on this issue.

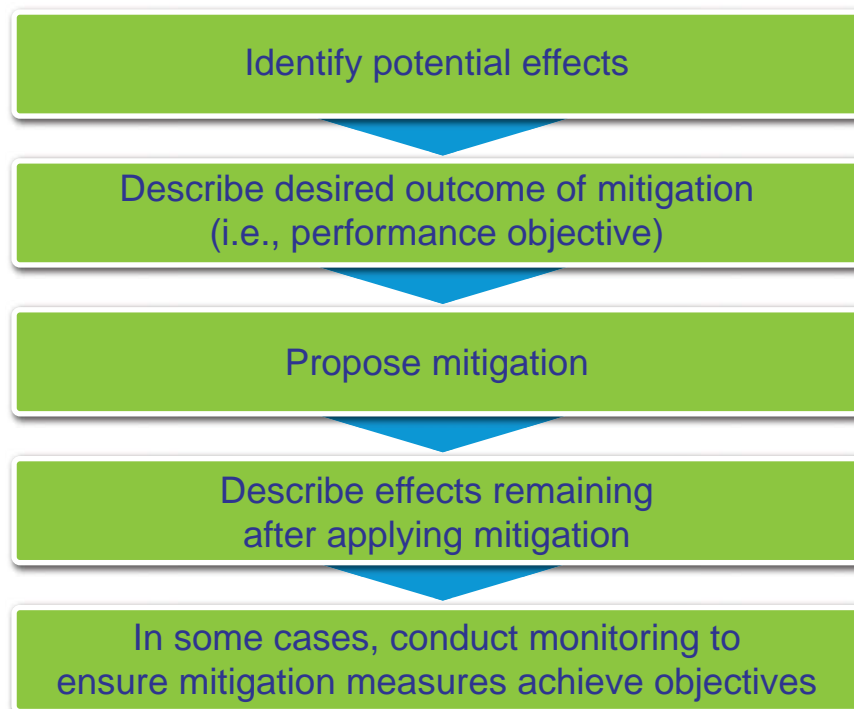
*e.g., Chatham-Kent Public Health Unit, 2008; Minnesota Department of Health, 2009; Australian Government, National Health and Medical Research Council, 2010; Australian Government, 2011, Massachusetts Department of Environmental Protection (MassDEP) and Massachusetts Department of Public Health (MDPH), 2012

Effects Assessment

Potential effects were assessed based on the following:

- ✦ Archaeological sites;
- ✦ Natural Heritage (e.g. birds, bats, wetlands etc.);
- ✦ Water Bodies;
- ✦ Cultural Heritage features;
- ✦ Noise; and
- ✦ Shadow flicker.

The diagram below shows the process followed for the effects assessment:



WIND ENERGY CENTRE - OPEN HOUSE

Archaeological Studies - Adelaide Wind Energy Centre

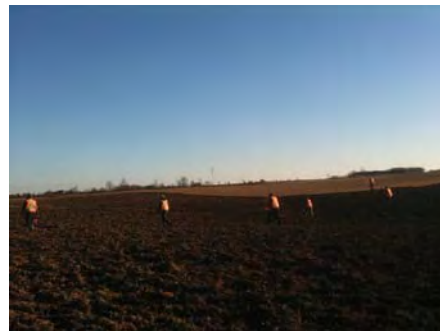
A Stage 1 Archaeological Assessment was conducted to establish if any known archaeological sites exist in or near the Project Location. Where the Stage 1 findings showed that there is archaeological potential, a Stage 2 Archaeological Assessment was completed to identify any archaeological resources and confirm if further studies are required. A Stage 3 Archaeological Assessment is conducted if a location has cultural heritage value or interest that needs further study or additional mitigation measures to protect the resource.

Stage 1 Key Findings:

- The presence of 1 pre-contact Aboriginal sites has been documented to be within 1 km of the Project Study Area.
- The potential for Aboriginal and Euro-Canadian resources within the Study Area was determined to be moderate to high. The potential for Aboriginal sites was primarily due to the proximity of the Study Area to nearby water sources, level topography, soils that can be used for agriculture, and known archaeological sites. The potential for Euro-Canadian sites was due to an account of documentation indicating early 19th century occupation, abandoned villages, plus the continued existence of historic transportation routes such as Egremont Road.

Stage 2 Key Findings:

- 29 archaeological sites were identified, including: 17 pre-contact Aboriginal sites and 12 Euro-Canadian sites
- A Stage 3 Archaeological Assessment was recommended for 13 of the archaeological sites, meaning that their locations were determined to have cultural heritage value or interest that requires further investigation
- To date, 6 of 13 have been completed, of which, 1 has been recommended for a Stage 4 Archaeological Assessment.



WIND ENERGY CENTRE - OPEN HOUSE

Cultural Heritage – Adelaide Wind Energy Centre

- A Heritage Assessment was conducted through the use of historic research, mapping, field surveys, and consultation with local historians, the municipalities of Middlesex, North Middlesex, and the Township of Adelaide-Metcalf to identify any potential effects to heritage resources as a result of the Project.
- Following the assessment, it was determined that no protected properties or cultural heritage landscapes with heritage value or interest are situated within or beside the Project Location.



WIND ENERGY CENTRE - OPEN HOUSE

Water – Adelaide Wind Energy Centre

- A Water Assessment and Water Body Report was completed in accordance with O.Reg 359/09 to identify and address any water bodies within 120m of the Project Location. A water body includes a lake, permanent stream, intermittent stream and seepage area.
- 19 water bodies were identified within the Project Area and 28 sites within these features were identified within 120 m of the Project Location
- No lakes, Lake Trout lakes, or seepage areas were identified within 120 m of the Adelaide Wind Energy Centre Project Location.
- The report concluded that the Project can be constructed and operated without any remaining effects that could harm the environment.

Potential Effects and Mitigation

The table below presents a summary of the potential effects on water bodies and proposed mitigation measures:

Project Phase	Potential Effect	Mitigation Measures
Construction and Decommissioning	Erosion and sedimentation	<p>Schedule clearing, grubbing and grading activities to avoid times of very high runoff volumes, wherever possible.</p> <p>Stabilize banks as soon as possible after construction disturbance (i.e. plantings, rock etc.), if insufficient time is available in the growing season to establish vegetative cover, an overwintering treatment such as erosion control blankets, fiber matting etc. should be applied to contain the site over the winter period.</p> <p>Minimize disturbance by keeping construction equipment outside and away from water bodies wherever possible.</p> <p>Work in dry conditions (i.e. low flow period) or isolate in-water work area using good engineering practices and dewatering techniques.</p> <p>Install silt fencing in-water downstream of dewatering activities.</p> <p>Dewatering discharge should be dissipated (i.e. sand bags, hay bales etc.)</p>
	Temporary disruption of fish habitat (in-water work)	<p>Restrict construction during sensitive timing windows, as indicated by local OMNR.</p> <p>Work in the dry (i.e. low flow) or isolate work area using good engineering practices or by working in dry conditions using accepted methods to bypass flows.</p> <p>Machinery should be operated in a manner that minimizes disturbance to the banks and bed of the watercourse.</p> <p>Stabilize banks as soon as possible after construction disturbance (i.e. plantings, rock etc.).</p>
	Soil Compaction	<p>Controlled vehicle access routes.</p> <p>Staging areas should be located away from water bodies (i.e. 30 m).</p> <p>Details of the Water Body Assessment can be found in the reports on this subject as part of the complete REA application.</p>
Operations		<p>Implement Spill Response Plan</p> <p>Implement road salt, sand management Plan.</p> <p>Avoid or limit use of pesticides, where possible.</p> <p>Address any impacts resulting from design or construction phases</p>

WIND ENERGY CENTRE - OPEN HOUSE

Natural Heritage - Adelaide Wind Energy Centre

- Information was gathered to identify and investigate natural features such as provincial parks, wetlands, woodlands or wildlife (e.g. bird or bat) habitats within 120m of the Project Location. Features were evaluated for significance, according to provincial criteria. Where significance was established an Environmental Impact Study (EIS) was conducted.
- The EIS identified potential negative effects on the environment, proposed mitigation measures, identified residual effects and their significance, and described how the environmental effects monitoring plan, and construction plan address any potential negative environmental effects.
- The following features were identified as significant:
 - 5 wetlands;
 - 42 woodlands;
 - 2 valleylands;
 - 26 Candidate Significant Wildlife Habitats, as well as generalized candidate significant wildlife habitats
- For each natural heritage feature identified as significant, potential effects were assessed and mitigation measures/monitoring commitments proposed depending on the type of project infrastructure affecting the feature.
- The EIS was approved by the MNR

The table below presents a summary of the potential effects and mitigation.

Project Phase	Potential Effect	Mitigation Measures
Construction and Decommissioning	Direct vegetation removal	Clearly delineate work area within 30 m of significant natural features or wildlife habitats using erosion fencing, or similar barrier, to avoid accidental damage to species to be retained. Any tree limbs or roots that are accidentally damaged by construction activities within significant woodlands or valleylands will be pruned using proper arboricultural techniques. No vegetation removal will occur in rare plant communities, sensitive landforms or significant wetlands. Periodic monitoring will take place during construction/decommissioning to ensure compliance
	Sedimentation and erosion	Implement a sediment and erosion control plan within 30 m of a significant natural feature or wildlife habitat. Install, monitor, and maintain erosion and sediment control measures (i.e. silt fences) around the construction areas within 30 m of a significant natural feature or wildlife habitat. Periodic monitoring will take place during construction/decommissioning to ensure compliance
	Spills (i.e. oil, gasoline, grease, etc.)	All maintenance activities, vehicle refueling or washing, and chemical storage will be located more than 30 m from any significant natural feature or wildlife habitat. Develop a spill response plan and train staff on appropriate procedures. Keep emergency spill kits on site. Dispose of waste material by authorized and approved offsite vendors. Any stockpiled material will be stored more than 30m of a wetland, woodland, or water body.
Operations	Disturbance and/or mortality to local wildlife (i.e. birds and bats)	Avoid placing turbines within blade length of significant habitat. Propose obstruction lighting scheme that minimizes risk to bird and bat collisions while fulfills Transport Canada requirements. Conduct post construction mortality monitoring according to the document <i>Bat and Bat Habitats: Guidelines for Wind Power Projects</i> and <i>Bird and Bird Habitats: Guidelines for Wind Power Projects</i> .

WIND ENERGY CENTRE - OPEN HOUSE

Natural Heritage: Birds

- NextEra Energy Canada has utilized an avian (bird) monitoring protocol that meets the requirements of the MNR natural heritage assessment guidelines for turbines and birds
- Bird surveys for the Adelaide Wind Energy Centre have included a wide variety of avian surveys, such as breeding bird and wintering raptor surveys. These surveys have been completed over several years of monitoring, including 2007, 2011, and 2012
- Bird surveys were conducted over several seasons to profile species and look at the following factors:
 - ✦ Breeding Activity
 - ✦ Behaviour Patterns
 - ✦ Significant or Critical Habitats
- The breeding bird surveys were conducted by establishing point count locations and conducting habitat searches in the study area, while recording visual and sound observations
- The last of the bird studies was completed in early July 2012 and data from the studies is currently being analyzed and compiled
- The survey methods, habitat assessment, and proposed mitigation measures for any significant habitat identified by these surveys has been approved by the MNR.
- The completed Natural Heritage Assessment details the mitigation measures that will be implemented for any significant avian habitat that is identified within 120 m of the Project Location.



WIND ENERGY CENTRE - OPEN HOUSE

Natural Heritage: Bats – Adelaide Project

- NextEra Energy Canada has implemented a bat monitoring program that is consistent with MNR expectations for proposed wind energy generating facilities
- Properties that contained wooded areas within 120 m (394 feet) of proposed wind turbines, measured from blade tip were examined by biologists to search for suitable bat habitat
- After identifying suitable bat habitats, certain features were chosen for more extensive monitoring which involved installing bat monitoring equipment within (or adjacent to) the wooded habitats for 10 days in June/July to record the number of bat passes
- These properties also required 10 nights of visual surveys that involved examining woodlands with spotlights and microphones to assess bat activity and species composition
- Bat monitoring was completed in accordance with the Ontario Ministry of Natural Resources “Bats and Bat Habitats: Draft Guidelines for Wind Power Projects (March 2010)” and has been reviewed and approved by the MNR as part of the REA’s Natural Heritage Assessment requirements
- In July 2011, after the completion of the 2011 monitoring program, the Ontario Ministry of Natural Resources has issued new guidelines “Bats and Bat Habitats : Guidelines for Wind Power Projects” with more specific criteria for evaluation bat habitat. Woodlands not studied under the 2010 bat guidelines were re-examined under these new 2011 bat monitoring guidelines, and assessed to determine if more detailed surveys would be required to determine significance.
- If any of the woodlands surveyed in 2012 are determined to be significant according to provincial standards, mitigation measures outlined in the Environmental Impact Statement will be implemented.



WIND ENERGY CENTRE - OPEN HOUSE

Noise Study

Noise studies were conducted to help determine the final turbine layout. The noise studies comprise the following steps:

- **Step 1:** Identify points of reception – dwellings (typically houses) that are within 2km of the wind turbines

The MOE Noise Guidelines generally define a Point of Reception (POR) as a house, campground, church, school or other sensitive building that is not located on the same premises as the wind farm, including its turbines and ancillary structures. POR's can also include locations on vacant lots that have residences as a permitted use; in this case a Vacant Lot Receptor (VLR) is required.

- **Step 2:** Obtain wind turbine specifications and noise emission ratings from the manufacturer
- **Step 3:** Using an initial wind turbine layout, predict the noise levels generated at points of reception using a noise prediction model to ensure allowable limits are not exceeded. The noise model is designed in accordance with standards set by the Ministry of the Environment (MOE)
- **Step 4:** Using the noise model results, revise the turbine layout as necessary to ensure that the final turbine layout meets all applicable noise guidelines

Noise requirements under Renewable Energy Approval Regulation (O.Reg. 359/09)

- Wind turbines will be set back from dwelling units that are not part of the project by at least 550m (1804ft) and must be at or below 40dBA.
- Noise from turbines must meet provincial noise limits as outlined in MOE publication 4709e “Noise Guidelines for Wind Farms”

Noise Assessment results

- Modelling of predicted noise levels from the proposed turbines, transformer station and proposed/existing wind farms within 5 km of the Project Location was undertaken. The results were as follows:

- ✦ All non-participating residences (vacant or occupied) comply with MOE guidelines for wind turbines – they are below the 40 dBA noise threshold and are greater than 550m from the nearest wind turbine;

