

Welcome!

NextEra Energy Canada welcomes you to tonight's event.

We are here to:

- ✦ Present the final turbine and transmission line route layout for the Goshen Wind Energy Centre
- ✦ Describe project modifications since the submission of the draft reports
- ✦ Present field study findings and how we propose to address any effects
- ✦ Receive your comments
- ✦ Answer your questions
- ✦ Discuss draft reports



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 Toronto, Ontario. We are the owner and operator of five 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: Conestogo Wind Energy Centre and the 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), one which is operational and one under construction.

NextEra Energy Resources

We are:

- ✦ The operator of over 100 wind projects in 19 states and four provinces with over 9,000 wind turbines providing over 10,000 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 24 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?



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
 - ✦ 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
2. Available and adjacent electricity transmission
 - ✦ 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



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
- ✦ Estimated 8-10 local full time jobs
- ✦ 200-300 construction jobs
- ✦ Delivers landowner lease payments
- ✦ Proposed Community Vibrancy Funds to support local initiatives

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

- ✦ \$166 million in corporate income tax
- ✦ \$3.3 million in property tax revenue
- ✦ \$21 million in landowner payments

Price Stability

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



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:

Reports were submitted in draft for public review on October 15, 2012

- ✦ **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 and cultural heritage resources
- ✦ **Natural Heritage Assessment Report** – to identify potential effects on birds, bats, other wildlife, woodlands, wetlands, areas of natural and scientific interest
- ✦ **Noise Assessment 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 Operations, Decommissioning Reports** – to describe these activities and identify mitigation measures to address any potential effects resulting from the various project phases
- ✦ **Consultation Report** – to demonstrate how NextEra Energy Canada engaged local governments and Aboriginal groups, and the community, during the project
- ✦ **Wind Turbine Specifications** – to describe the turbine technology selected for the project

Renewable Energy in Ontario

The Green Energy and Green Economy Act

- Developed to stimulate the “green” economy in Ontario

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

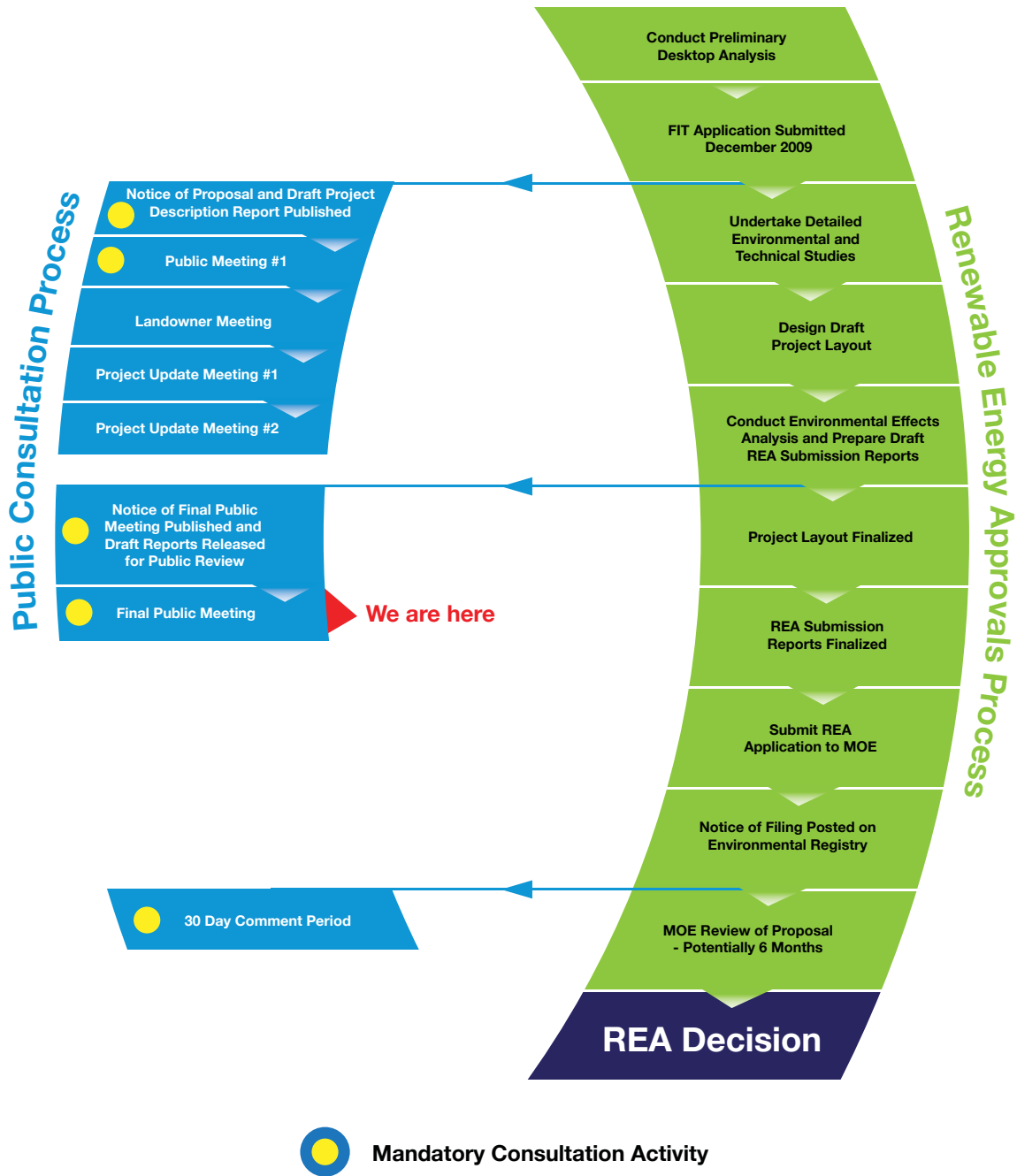


Provincial Green Energy Initiatives and the Feed-in-Tariff Program:

- 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 has 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. The Conestogo Wind Energy Centre began commercial operation in December 2012. The Summerhaven Wind Energy Centre is anticipated to be in commercial operation the summer of 2013.

Renewable Energy Approval Process



The Goshen Project

- The proposed Goshen Wind Energy Centre project is located within the municipalities of Bluewater and South Huron in Huron County, Ontario.
- The project will be able to generate up to 102-megawatts of electricity, enough energy for nearly 25,500 homes in Ontario.
- Up to 62 1.6-megawatt turbines and one 1.56-megawatt turbine will be constructed; however, up to 72 turbines will be permitted through the Renewable Energy Approvals process.

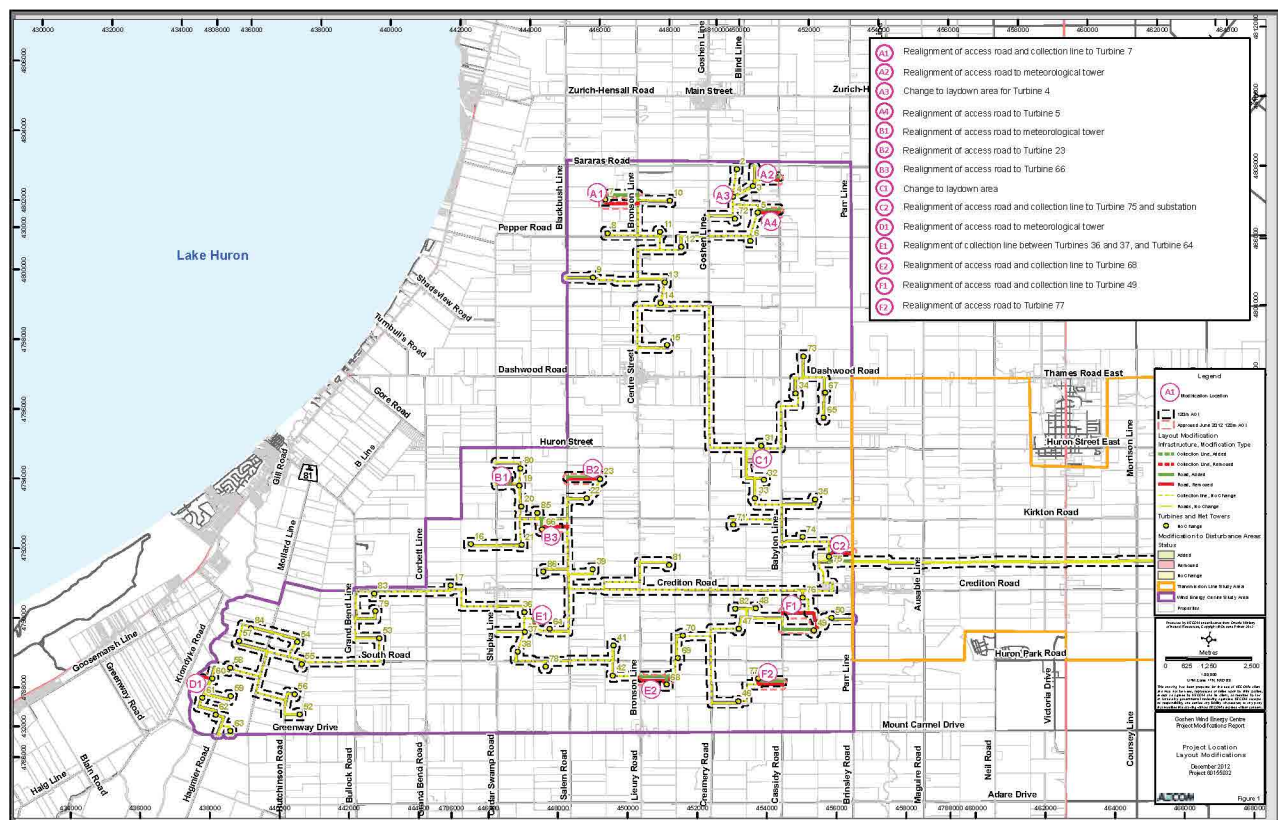
Facility components for the Goshen Wind Energy Centre will include:

- ✦ Laydown and storage areas (including temporary staging areas, crane pads and turnaround areas surrounding each wind turbine);
- ✦ Temporary electrical service line for the purpose of providing power to the construction trailers located at the laydown area;
- ✦ A transformer substation;
- ✦ Underground 34.5 kV electrical collection lines to connect the turbines to the transformer substation and other ancillary equipment such as above-ground junction boxes;
- ✦ 115 kV transmission line to run from the transformer substation to a breaker switch station which will connect the electricity generated by the project to the existing Hydro One 115 kV transmission line;
- ✦ Turbine access roads;
- ✦ Three permanent meteorological towers; and
- ✦ An operations and maintenance building including an electrical service line connected to the local distribution service.



Modifications to the Project Since Circulation of Draft REA Reports

- Modifications have been made to the Project Location since the draft reports were circulated to address landowner requests. These include the following:
 - ✦ Realignment or relocation of the access roads to Turbines 5, 7, 23, 49, 66, 68, 75 and 77;
 - ✦ Realignment or relocation of the access roads to meteorological towers;
 - ✦ Realignment or relocation of the collection lines to Turbine 7, 49, 68, 75 and between Turbines 36, 37 and 64; and
 - ✦ Changes to the laydown areas for Turbine 4 and the substation.
- These modifications do not result in any new effects to those previously identified through the various studies conducted. Please see the Goshen Project Modifications Report for further information.



Your Concerns... Our Response

Q: How loud are wind turbines?

A: With the evolution of modern wind turbine technology, the mechanical noise from the turbine is almost undetectable. Turbines only run when the wind is blowing and the sound of the wind masks most of the noise. What's more, wind projects in Ontario are under strict sound guidelines, as prescribed by the Ministry of the Environment. For residences in the area, the Goshen Wind Energy Centre will be quieter than many common sounds – such as a quiet room.

NextEra is committed to meeting the sound limit requirements set by the Ministry of the Environment. If concerns regarding sound level arise, we will investigate and, if necessary, remedy the situation as soon as possible.

Q: This area is a stopping point for migrating Tundra Swans. Will you consider this when deciding where to put a wind turbine?

A: Yes, we continue to consult with local organizations to understand the swans' migration route and stopover areas. This information was considered, along with environmental, local infrastructure and socio-economic information, when determining where best to place a wind turbine.

Q: Do turbines pose a danger to area wildlife (e.g., birds or bats)?

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

Q: What impact do wind turbines have on our health?

A: 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 link between wind turbines and negative health effects. For more information, please review the Health and Wind Turbines information board.

Your Concerns... Our Response

Q: What effect will a wind farm have 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. 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.

Q: Do wind turbines cause stray voltage?

A: Stray voltage is a low-level current or shock (typically under 10 volts) that can be caused by improper grounding or, in some cases, an ungrounded electrical system. Stray voltage is not a consequence of wind energy. It may be present in any electrical distribution system regardless of source and may be especially prevalent on working farms because of the nature of these operations.

NextEra will adopt industry best practices at all times to minimize the risk of stray voltage and ensure our Wind Energy Centres are built and maintained within acceptable levels, as prescribed by the local safety code. While we do not intend to connect the Goshen Wind Energy Centre to the local distribution system that serves barns and houses in the area, we are aware that transmission lines – when not properly designed – can induce current on nearby distribution lines. To address this and to minimize the impact on local distribution customers, we are already working closely with Hydro One.

Q: Who pays to decommission the turbines?

A: Goshen Wind, Inc. is responsible for any decommissioning costs. The process to decommission the turbines has been established through the Renewable Energy Approval process, which specifies the need for a Decommissioning Plan. The community has an opportunity to provide input and comment on the plan that will be part of the application filed with the Ministry of the Environment.

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 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

Turbine Siting Process

Developing a Site Plan

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

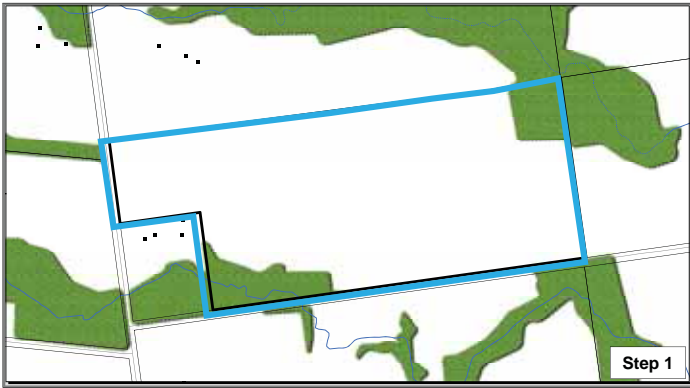
1. Identify a sufficient wind resource and study the wind regime for several consecutive years
2. Work with local landowners to option land for wind turbines and ancillary facilities (i.e. collection lines and access roads)
3. Identify technical and environmental constraints based on input from project 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 constraints 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 terrestrial features provided that an Environmental Impact Study is completed and mitigation measures identified.

Table 1. Turbine Siting Process Constraint Categories

Constraint Category	Setback Distance*
Terrestrial 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: 120m
Aquatic Features	<ul style="list-style-type: none"> Streams and Waterbodies: 30m
Local Infrastructure	<ul style="list-style-type: none"> Petroleum Resource Facilities: 75m Road Right-of-Way: 60m Railway Right-of-Way: 60m
Socio -Economic	<ul style="list-style-type: none"> Property Line: 60m Residences and other uses sensitive to noise: 550m

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

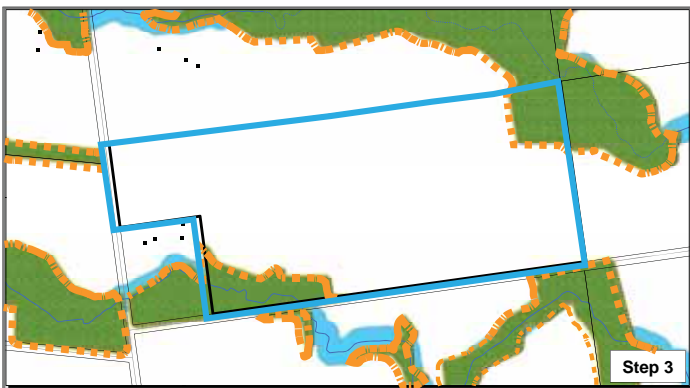
Turbine Siting Process



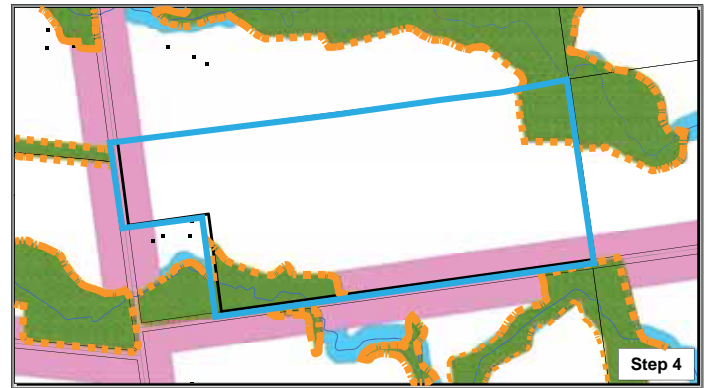
✦ Step 1: Work with local landowners to option land



✦ Step 2: Identify natural constraints



✦ Step 3: Identify aquatic constraints



✦ Step 4: Identify local infrastructure constraints



✦ Step 5: Identify socio-economic constraints



✦ 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
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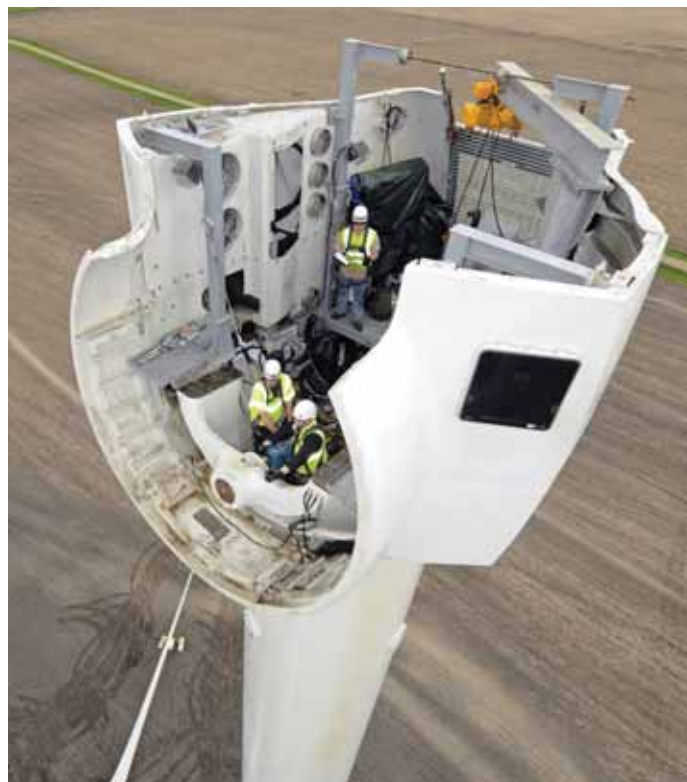
Construction Plan

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 11 m (36 feet) wide during the construction and operations phases
- ✦ 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



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



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



Health and Wind Power

- ✦ Many studies have been conducted world-wide to examine the relationship between wind turbines and possible human health effects (e.g., audible/inaudible noise, shadow flicker, electromagnetic fields (EMF)).
- ✦ **Audible / Inaudible Noise:** Ontario's Chief Medical Officer of Health (May 2010) conducted a review of the scientific literature related to wind turbines and public health. The review concluded that:

"while some people living near wind turbines report symptoms such as dizziness, headaches, and sleep disturbance, 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."

- ✦ **Shadow flicker:** Scientific evidence suggests that shadow flicker from wind turbines does not pose a risk of photo-induced seizures; modern wind turbines simply don't rotate at a speed that has been linked to this condition (generally less than 20 rpm vs. over 60 rpm).
- ✦ **EMF:** Health Canada (2012) has stated:

"Health Canada does not consider that any precautionary measures are needed regarding daily exposures to EMFs at ELFs [extremely low frequency]. There is no conclusive evidence of any harm caused by exposures at levels found in Canadian homes and schools, including those located just outside the boundaries of power line corridors"

- ✦ Overall, health and medical agencies agree that when sited properly, wind turbines are not causally related to adverse effects*.
- ✦ Reports of annoyance by people living around wind turbines appear to be more related to variables like personal attitude and whether a person can see a turbine from their home and not a turbine-specific variable like noise.

*"Ontario doctors, nurses, and other health professionals support energy conservation combined with wind and solar power – to help us move away from coal"**.*

- ✦ Scientists and medical experts around the world continue to publish research in this area. In fact, Health Canada will be undertaking a study of wind turbine projects across the country, with results expected in 2014. It is important to note that Health Canada has not called for a moratorium on new wind projects across Canada while they undertake their research. Through our health consultants, Intrinsic, NextEra Energy Canada is committed to keeping informed on this issue.

*Chatham-Kent Public Health Unit, 2008; 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.

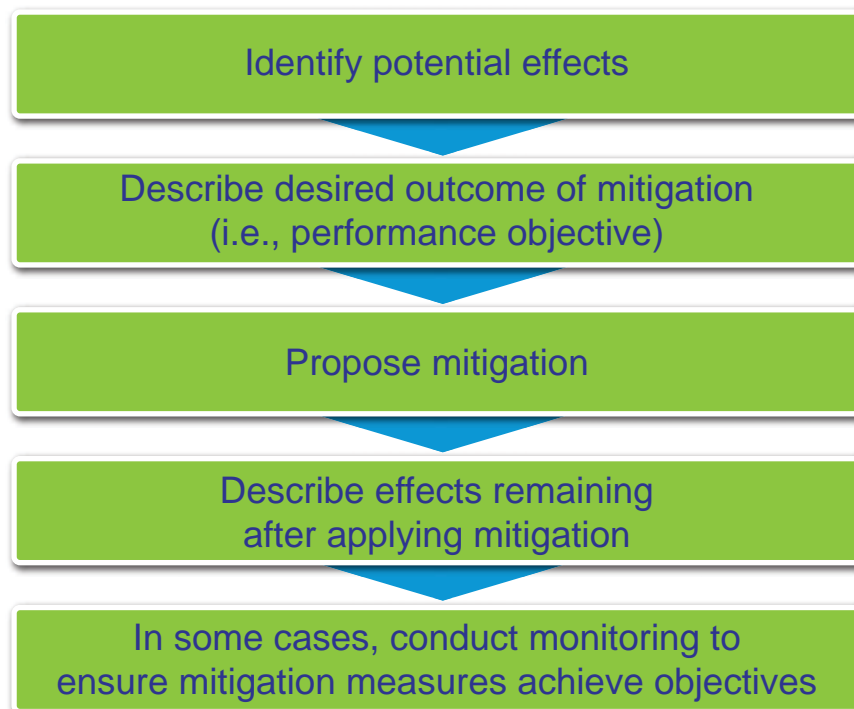
**Ontario College of Family Physicians, Registered Nurses Association of Ontario, Canadian Association of Physicians for the Environment, Physicians for Global Survival, the Asthma Society of Canada, and the Lung Association.

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:



Archaeological Studies - Goshen Project

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 potential for discovering Aboriginal and Euro-Canadian archaeological resources was deemed to be moderate to high;
- Important features included: drinking water sources, areas of flat landscape, soils for agricultural purposes, known archaeological sites and Euro-Canadian historic documents; and
- Evidence exists for both Aboriginal and Euro-Canadian use of the area over time.

Stage 2 Key Findings:

- 61 archaeological sites were identified, including: 36 pre contact Aboriginal sites, 20 historic Euro-Canadian sites and 5 multi-component sites;
- Stage 3 Archaeological Assessments were recommended for approximately 30 sites, meaning that the locations have cultural heritage value or interest that requires further investigation. That work is underway and will be completed prior to the construction of the project.
- No further investigation was deemed necessary at any of the other sites.



Cultural Heritage – Goshen Project

- A Cultural Heritage Assessment was conducted using historic research, mapping, field surveys and consultation with local historians;
- No protected properties or protected cultural heritage landscapes were found in the Project Location; and
- 71 structures (35 houses and 36 barns) older than 40 years were identified within the Project Location. These structures were identified as contributing to the character of the rural area. No further work was recommended since there are no anticipated direct or indirect impacts on these structures.



Water – Goshen Project

- A Water Assessment was conducted to identify water bodies within 120m of the Project Location. A water body includes a lake, permanent stream, intermittent stream and seepage area, defined under O.Reg. 359/09.
- 83 water bodies were identified within 120m of the Project Location through desktop research and field investigations.
- Key Findings
 - ✦ 31 water bodies are located within 120m of turbines;
 - ✦ 42 are crossed by a collection line, with an additional 14 located within 120m of a collection line;
 - ✦ 8 are crossed by an access road, with an additional 15 located within 120m of an access road;
 - ✦ 9 are crossed by overhead wires for a transmission line, 1 is crossed via horizontal directional drilling for the transmission line, and 2 are located within 120m of the transmission line;
 - ✦ 1 is located within 120m of the breaker switch station; and
 - ✦ 3 are located within 120m of meteorological towers.

Potential Effects and Mitigation

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

Project Phase	Potential Effects	Mitigation Measures
Construction/ decommissioning	Erosion and sedimentation from clearing vegetation	Erosion blankets, erosion control fencing and straw bales will be used to control erosion and prevent soil from entering watercourse.
	Degradation of fish habitat from access roads crossing water courses	Culverts will be designed and installed in a way to prevent barriers to fish movement.
	Soil compaction which could increase water runoff into watercourses	Changes in land contours and natural drainage will be minimized and temporary storage basins installed to allow water infiltration, or permanent stormwater management facilities used as necessary.
Operations	Water contamination from accidental spills associated with maintenance activity (unlikely to occur).	Spill response plan will be developed and an emergency spill kit kept on site. Any spills will be reported to the Ministry of the Environment and local municipalities.

Natural Heritage - Goshen Project

- 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 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 negative environmental effects.
- The following features were identified as significant:
 - ✦ 14 wetlands;
 - ✦ 75 woodlands;
 - ✦ 1 valleyland; and
 - ✦ 66 types of significant wildlife habitat (e.g. amphibian breeding habitats, rare forest types, bat maternity colonies, waterfowl nesting habitat, woodland raptor nesting habitat.)
- 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 table below presents a summary of the potential effects and mitigation.

Potential Effects and Mitigation

Project Phase	Potential Effect	Mitigation Measures
Construction/ Decommissioning	Increased erosion, sedimentation and turbidity from clearing vegetation for access roads, crane paths etc.	Erosion control fencing will be kept in place until disturbed areas are stable. All stockpiled materials will be kept away from the features and periodic monitoring will take place during construction to ensure compliance.
	Damage to vegetation	Protective fencing installed to ensure work is kept within identified zones. Periodic monitoring will take place during construction to ensure compliance.
	Soil and water contamination from accidental spills or oil, gasoline or grease.	A spill response plan will be developed to outline the steps to be taken in the event of a spill. An Emergency Response and Communications Plan has been included in the Design and Operations Report.
Operations	Disturbance or mortality to wildlife (e.g. birds and bats) from turbine collisions.	Operational mitigation techniques including periodic shut down of turbines when the chances for bird or bat collisions are increased. Monitoring will include three year post-construction mortality surveys for birds and bats which will be submitted to the MNR.

Noise Studies - Goshen Project

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
- **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 at 6m/s.
- Noise from turbines must meet provincial noise limits as outlined in MOE publication 4709e “Noise Guidelines for Wind Farms”

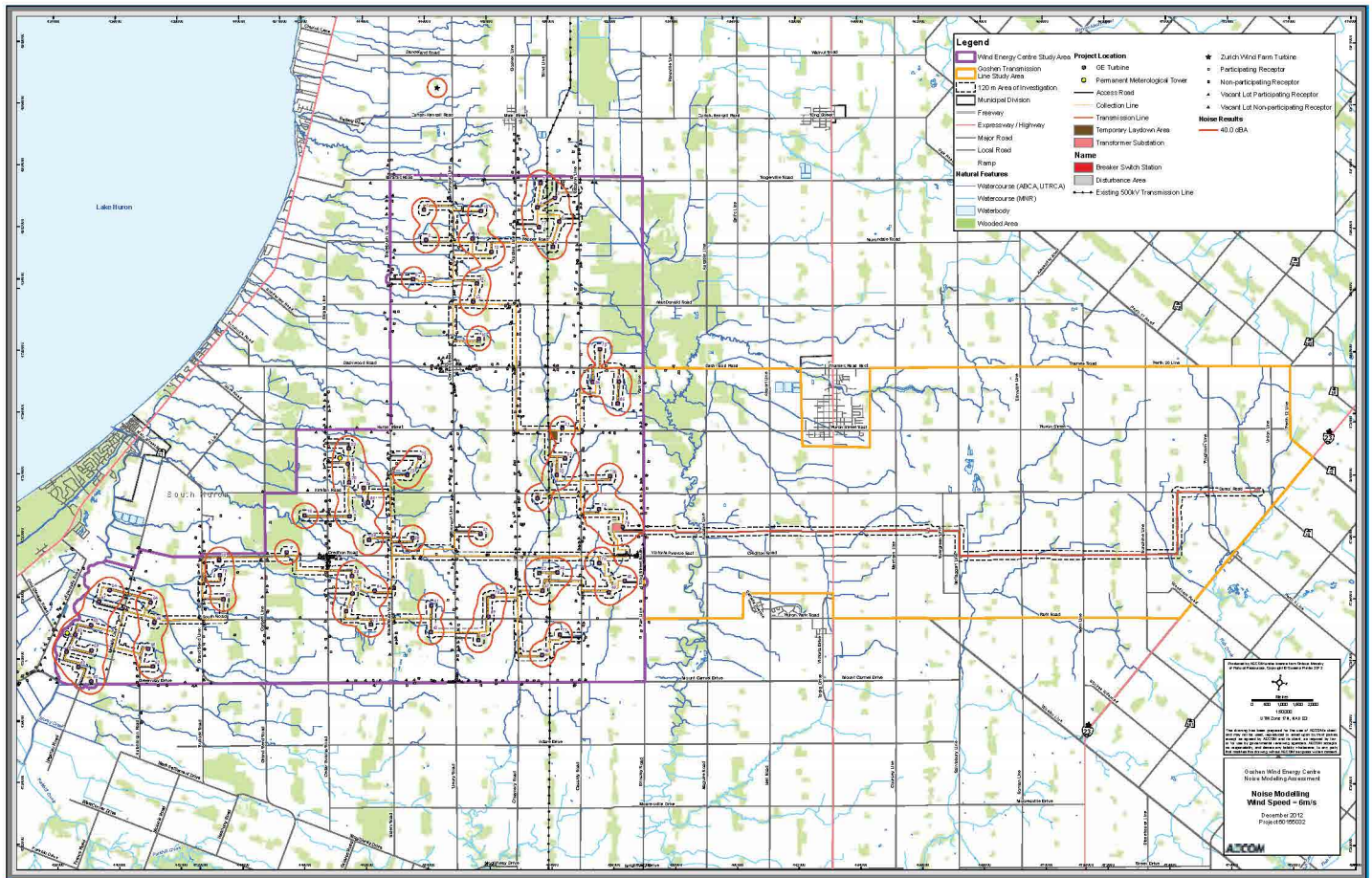
Noise Assessment results

- Modelling of predicted noise levels from the proposed turbines, transformer station and the existing Zurich wind turbine was undertaken. The results were as follows:
 - ✦ All non-participating residences (vacant or occupied) comply with MOE guidelines for wind turbines – they are predicted to be below the MOE noise criteria and are greater than 550m from the nearest wind turbine;
 - ✦ A 6m high noise barrier on west, south and east sides will ensure that the transformer substation is in compliance with MOE noise limits.



WIND ENERGY CENTRE - OPEN HOUSE

Noise Studies - Goshen Project



Wind speed of 6 m/s

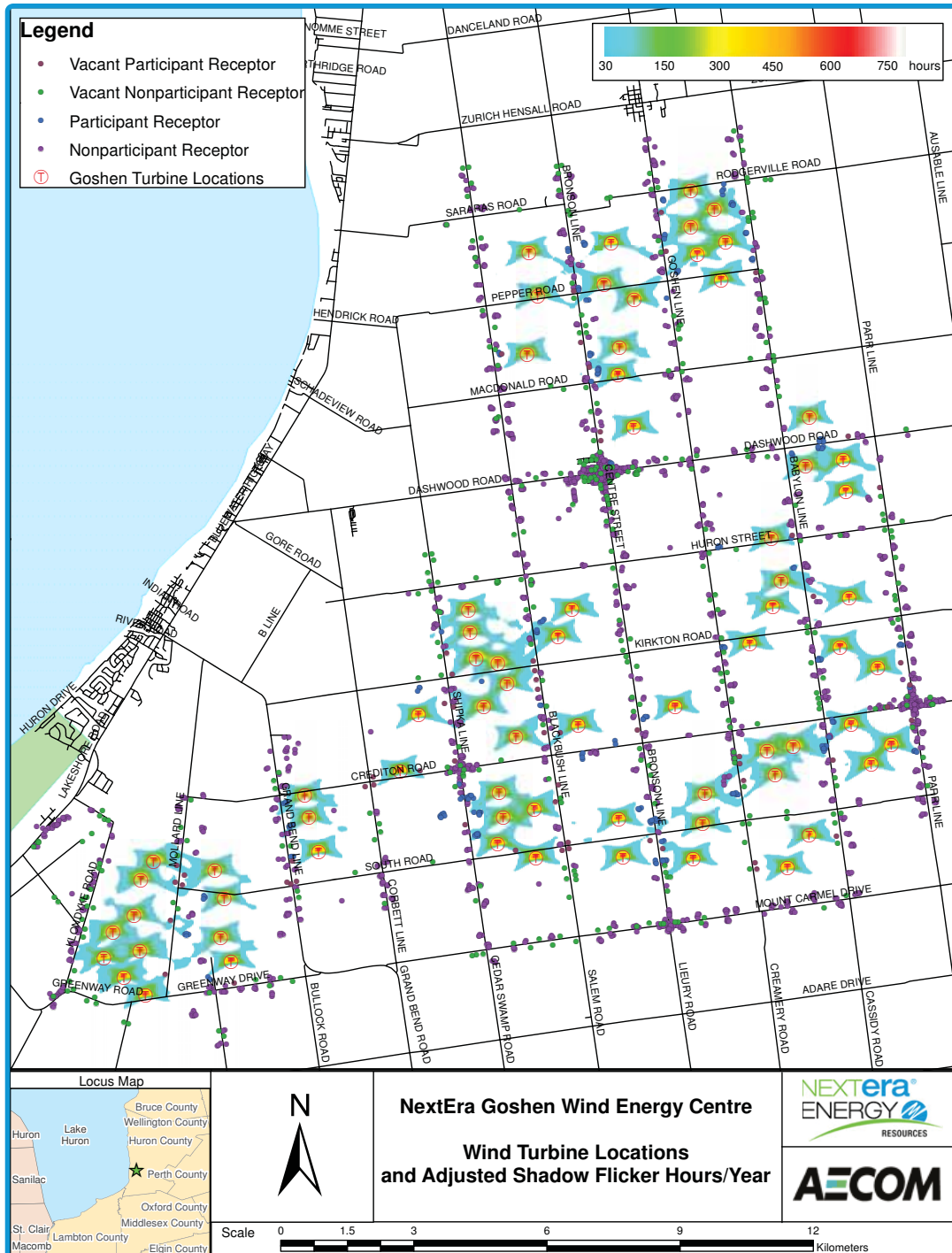
Shadow Flicker - Goshen Project

- Shadow flicker analysis is not required under O.Reg. 359/09; however, it has been undertaken to complement the REA application for the Project.
- Shadow flicker is a temporary condition resulting from the sun casting intermittent shadows from the rotating blades of a wind turbine onto a sensitive receptor such as a window in a building. For shadow flicker to occur, the following criteria must be met:
 1. The sun must be shining and not obscured by any cloud cover.
 2. The wind turbine must be between the sun and the shadow receptor.
 3. The wind turbine must be facing directly towards (or away from) the sun.
 4. The line of sight between the turbine and the shadow receptor must be clear. Obstacles, such as trees, buildings or other structures, will prevent or reduce shadow flicker from occurring at the receptor.
 5. The receptor has to be close enough to the turbine to be in the shadow.
 6. The turbine is operational and not stationary due to a lack of wind or maintenance activities.

Shadow Flicker Assessment and Results

- To assess the effects of shadow flicker, hourly meteorological data, terrain features, receptor, and turbine locations were considered to show the predicted amount of hours when shadow flicker will occur.
- The worst case maximum shadow flicker per day is 1.43 hours and the worst case maximum shadow flicker per year is 46.2 hours.
- This is a conservative analysis that does not account for maintenance time, winds less than 3 m/s when the turbines will not operate, or that the turbine will rarely be directly facing the sun which will shorten the shadow from the turbine blades.

Shadow Flicker Contour Map - Goshen Project



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 substation.**
- Underground electrical lines will be cut and the ends buried to 1m below grade, leaving the lines in place with the consent of the landowner.

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.
- 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 based on receiving a new contract to sell power from the Ontario Power Authority, and turbines may still be decommissioned.



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.



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 breaker switch station.
- The breaker switch station will occupy less than 5 acres of land and is 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

- Landowners will be paid a fair market value for the property subject to an easement.
- Compensation will be made for property damage caused during construction and operation of the transmission line (including crops).
- Additionally, we will repair damages to fences, gates, tiling, roads, etc.

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.

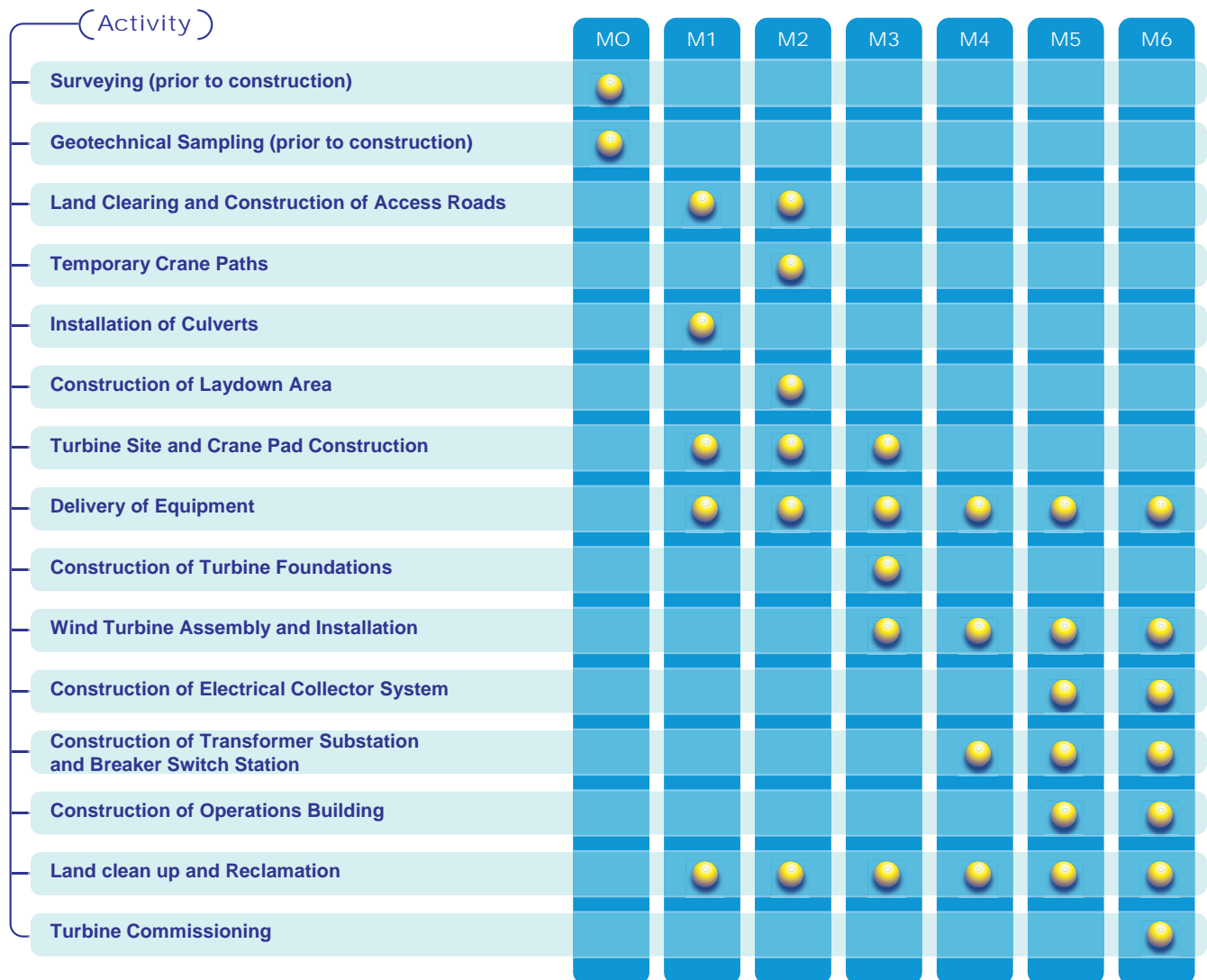
- Transmission structures will typically be single poles made of metal, wood, or concrete.
- Poles will be approximately 18 – 27 metres (60 - 90 feet) in height.
- A typical span between poles will be 91 – 182 metres (300 - 600 feet).
- Transmission lines must be constructed to standards outlined by 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 have been conducted along the proposed transmission line route including:
 - ✦ Vegetation studies;
 - ✦ Aquatic habitat assessments; and
 - ✦ Birds, bat and wildlife studies.

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 fall 2013 and last for 6 months.



Next Steps

REA Process

- The final REA reports will be submitted following the public open houses which will initiate the Ministry of the Environment's review.
- After the MOE deems the REA complete, final reports will be made available online at www.NextEraEnergyCanada.com for comment by the public and by stakeholders.

Other Approvals Required Before Construction

- In addition to the REA, permits and certificates of approval may be required from approval agencies before construction can begin. These may include:
 - ✦ Archaeological Clearance from the Ontario Ministry of Tourism, Culture and Sport (MTCSS);
 - ✦ Fisheries Act Authorizations from the Federal Department of Fisheries and Oceans (DFO);
 - ✦ Aeronautical Obstruction Clearance from Transport Canada;
 - ✦ Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Permit from the conservation authorities; and
 - ✦ Other permits or authorizations from the Ontario Ministry of Natural Resources (MNR) and local municipalities.

Please visit www.NextEraEnergyCanada.com for more details on the progress of the project

Thank you for Attending!

- Thank you for attending this evening's Event
- Your input is important to us: please fill out an exit questionnaire and leave it with us tonight.
- Should you have any further questions or comments, please do not hesitate to contact us:

E-mail: Goshen.Wind@NextEraEnergy.com

Phone: 1-877-257-7330

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Goshen Wind Energy Project

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Marc Rose, Project Manager

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WIND ENERGY CENTRE - OPEN HOUSE

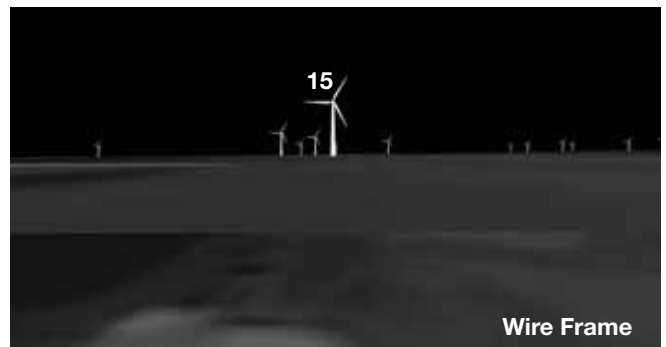
Visual Simulation: East of Dashwood Looking North



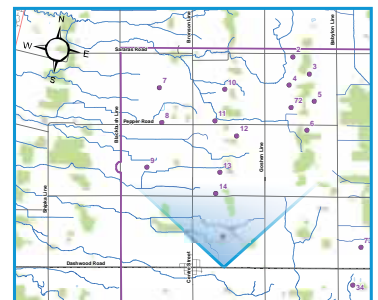
Visual Simulation



Original Photo

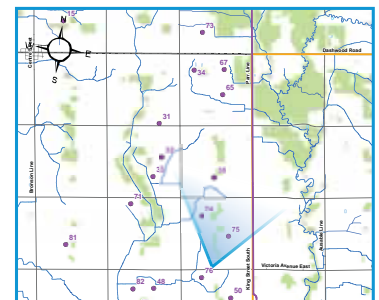
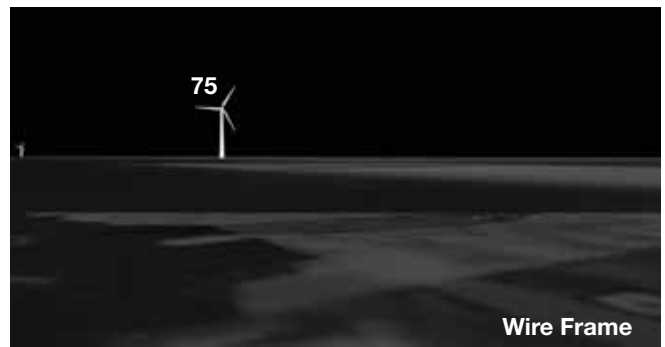


Wire Frame

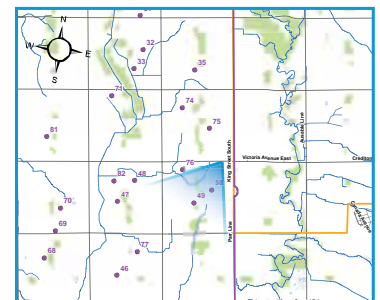
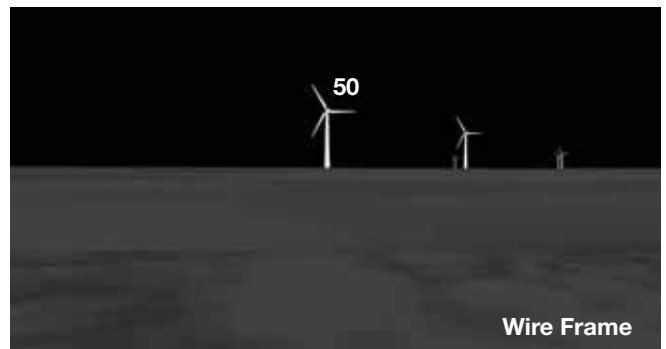


WIND ENERGY CENTRE - OPEN HOUSE

Visual Simulation: West of CREDITON Looking North



Visual Simulation: West of CREDITON Looking South



Visual Simulation: West of Zurich Looking South

