Wind Energy Centres - Open House

Welcome!

NextEra Energy Canada welcomes you to tonight's Public Meeting.

We are here to:

- Describe the Project
- Provide you with information on the Renewable Energy Approval Process
- Answer your questions
- Consider your comments

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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 wind 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

NextEra Energy Canada is currently working toward approval of eight wind energy centres in Ontario.

NextEra Energy Resources

We are:

- The operator of approximately 85 wind projects in 17 states and 3 provinces with more than 9,500 wind turbines providing over 8,500 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 21 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?

Canadian Green Power:

NextEra Energy Canada's Local Partner

Canadian Green Power Investment & Management Services Inc. is dedicated to enabling Ontario to become self-sufficient in the development and production of clean, green energy. Canadian Green Power:

- Is an independently owned wind power development company headquartered in Ontario
- Works closely with local landowners to determine potential locations for wind turbines and negotiate safe and respectful access to landowner property
- Has been active in Huron County since 2005

Over 200 local landowners are currently participating in the NextEra Energy Canada/Canadian Green Power wind project collaboration.

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Why is Southwestern Ontario 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

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 employment opportunities
- Adds tax base to the local municipalities
- Supports the economy through purchases of regional goods and services
- 6-10 full time jobs per project
- 200-300 construction jobs
- Delivers landowner lease payments

Price Stability

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

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The Goshen Project

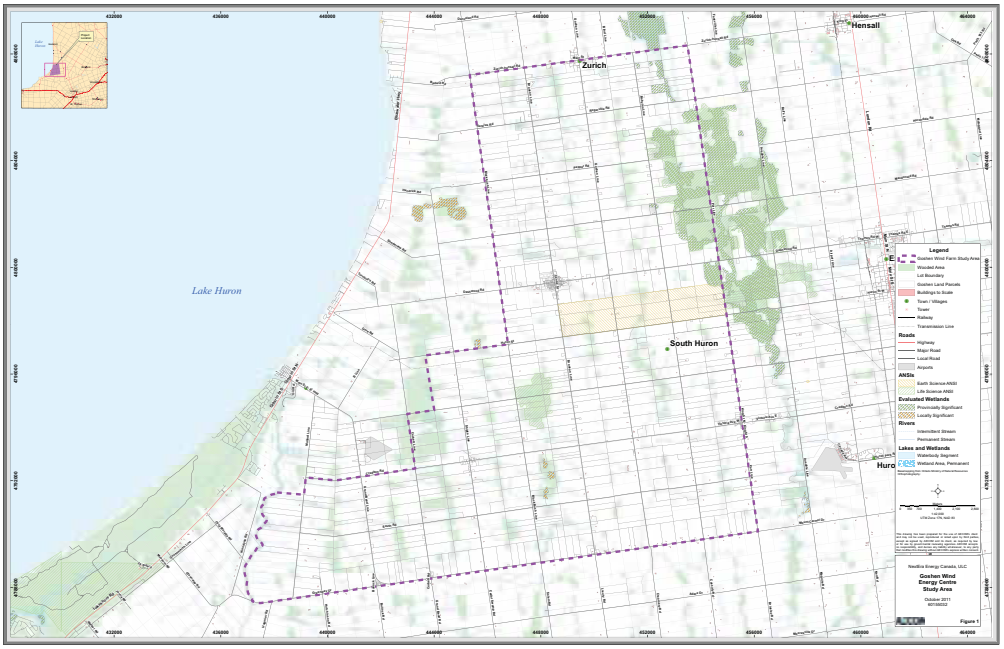
- The proposed Goshen Wind Energy Centre project is located in the Municipalities of Bluewater and South Huron in Huron County, Ontario;

- The project will have a maximum nameplate capacity of up to 102-megawatts of electricity, enough energy for nearly 25,500 homes in Ontario;

- Up to 63 1.6-megawatt turbines will be constructed; however, up to 74 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) for construction equipment and supplies
- Underground electrical collection lines (on private property and in the municipal right-of-way) to connect the turbines to the transformer substation
- A transformer substation to feed the electricity generated by the project directly into the existing 115 kV transmission line in the study area
- Turbine access roads for construction and maintenance
- A permanent meteorological tower to measure wind speeds, wind direction, temperature and humidity during operation
- An operations and maintenance building



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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) which have been awarded a FIT contract by the Ontario Power Authority and have filed their respective Renewable Energy Approval application. Both are awaiting a decision.

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Ontario's Renewable Energy Approval Process

- The Renewable Energy Approval (REA) process, outlined in Ontario Regulation 359/09, is a requirement for larger 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 process 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 and Culture (MTC) and local conservation authorities will also 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 Report** – 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, throughout the development of the project
- **Wind Turbine Specifications** – to describe the turbine technology selected for the project

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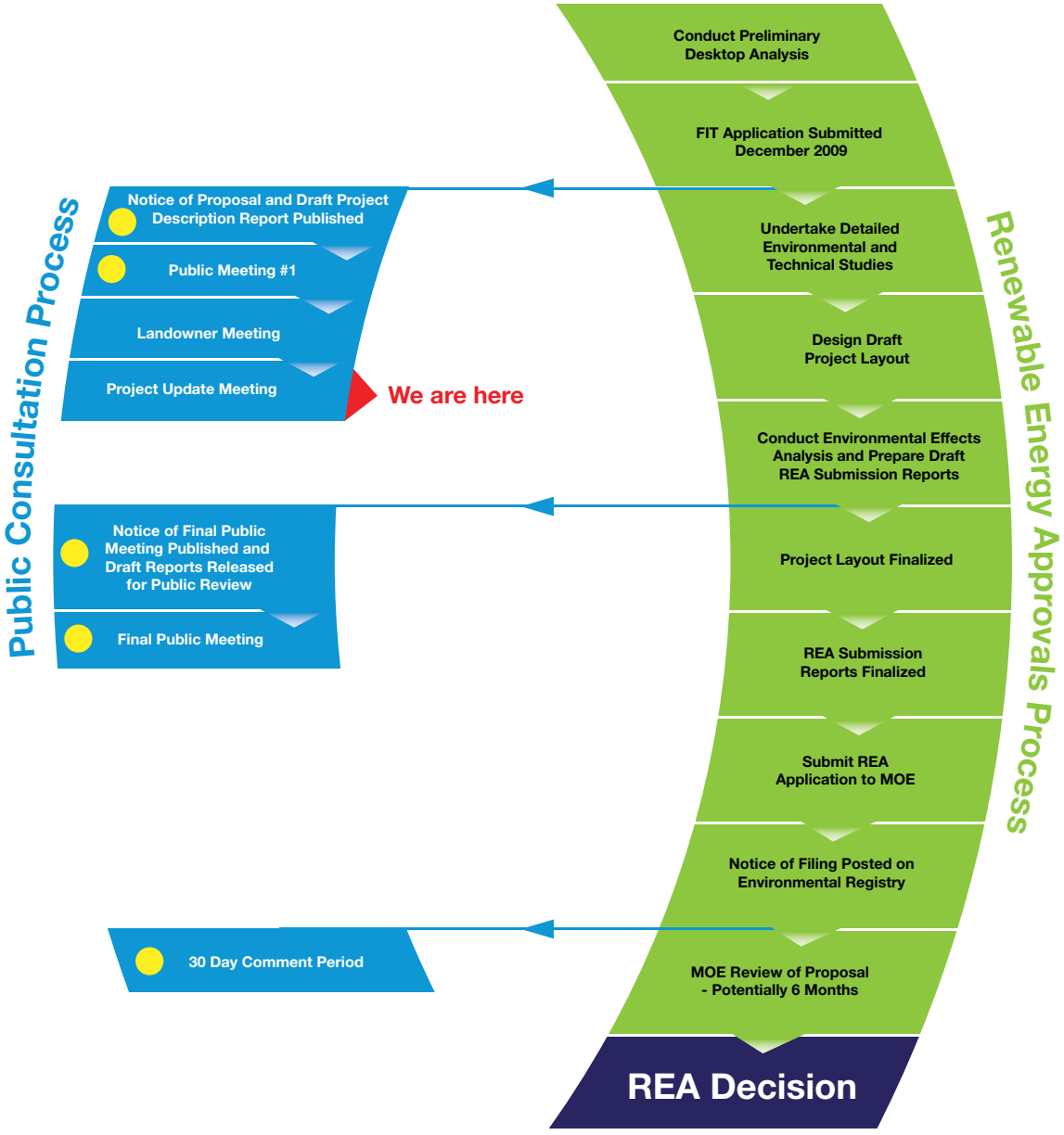
Renewable Energy Approval Process



Mandatory Consultation Activity

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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

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Archaeological Studies

- The work is being completed by licensed archaeologists according to Ministry of Tourism and Culture (MTC) standards with oversight provided by the Oneida Council of Chiefs

- An Archaeological Assessment Study will be submitted to MTC for review and will:
  - Identify archaeological resources within the study area
  - Describe potential negative effects on archaeological resources during construction, operation and decommissioning
  - Propose mitigation measures to avoid or minimize negative effects on those resources

- A desktop archaeological study (Stage 1 Archaeological Assessment) was carried out in fall 2010 to determine if there is potential to identify previously undiscovered archaeological resources within the study area

- A Stage 2 Archaeological Assessment commenced in Spring 2011 after the snow melted and the ground was firm enough to walk on
  - Archaeologists conduct pedestrian surveys at 5m (16ft) intervals to identify/ collect any artifacts found in areas of potential disturbance

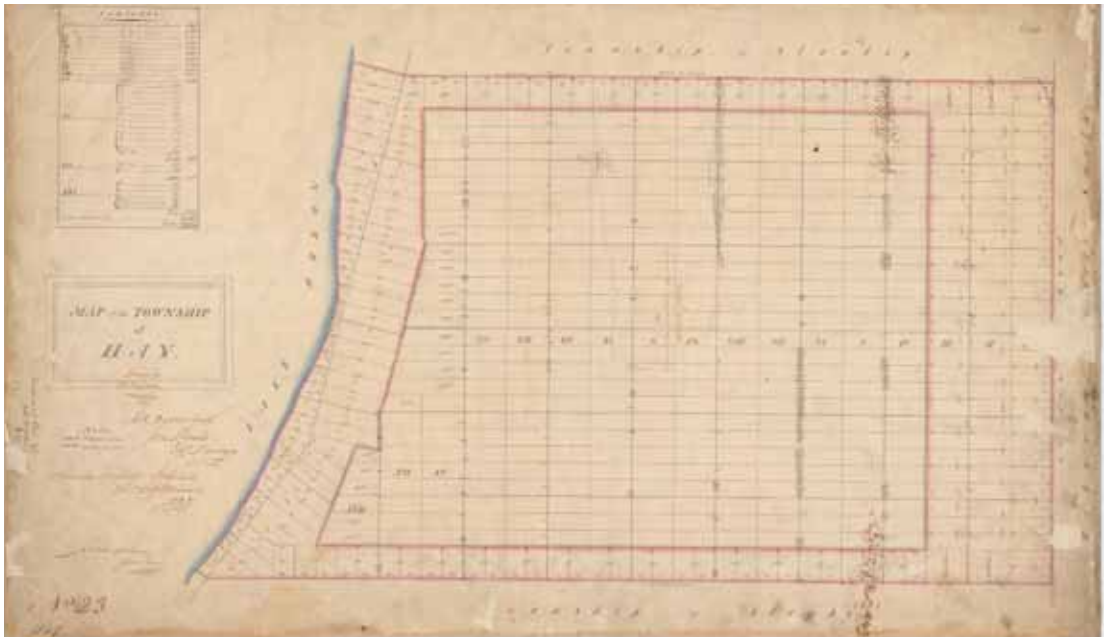
- The results of this assessment will determine whether a Stage 3 Archaeological Assessment is required – this is a site-specific assessment involving further research and fieldwork to identify the boundaries of any archaeological sites identified during Stage 2

- Upon completion, a comprehensive Archaeological Assessment will be submitted to the MTC for acceptance into the Ontario Public Register of Archaeological Reports

- Findings from the archaeological studies are being considered in the wind farm design to minimize impacts as much as possible

Cultural Heritage – Goshen Project

- A Cultural Heritage Assessment was carried out to assess built heritage resources and cultural heritage landscapes in the study area
- This assessment involved:
  - The development of a land use history of the study area through the use of historical archival research and a review of historical mapping
  - The identification of protected properties, built heritage resources (e.g., buildings) and cultural heritage landscapes through municipal consultation, a windshield survey and background research
  - Public consultation with knowledgeable members of the historical community including local historians and archivists
- Initial consultation determined that no protected properties are located within the Goshen Study Area
- At least 25 sites, 40 potential built heritage resources and 3 cultural heritage landscapes were identified in the study area
- A Cultural Heritage Assessment report will be submitted to MTC for review and will:
  - Identify cultural heritage resources within the study area
  - Describe potential negative effects on heritage resources during construction, operation and decommissioning
  - Propose mitigation measures to avoid or minimize negative effects on those resources
- It is anticipated that there will be no detrimental direct or indirect impacts to the built or cultural heritage resources located in the study area



Historical Mapping of Study Area

Natural Heritage: Water

- Aquatic studies have been underway since the summer of 2011
- This work involves aquatic biologists visiting watercourses within 120 m (394 feet) of proposed project infrastructure and conducting investigations to:
  - Measure stream width and depth
  - Characterize vegetation cover, substrate composition and water flow patterns
  - Observe the presence of fish and groundwater
- Findings from these studies will be used to determine potential effects on fish, water quality and surface and ground water quantity as a result of the proposed project. These findings are being considered in the wind farm design to minimize impacts
- NextEra Energy Canada will submit a Water Assessment and Water Body Report to the Ministry of the Environment that will outline potential effects, proposed mitigation measures and monitoring commitments and determine the significance of residual effects
- NextEra Energy Canada will obtain all applicable permits from the appropriate approval agencies, including the Ausable Bayfield Conservation Authority and the Ministry of Natural Resources (MNR)

Natural Heritage: Birds

- NextEra Energy Canada has utilized an avian (bird) monitoring protocol that meets the requirements of MNR's natural heritage assessment guidelines for turbines and birds
- Bird surveys have included Spring Bird Migration Surveys, Breeding Bird Surveys, Fall Bird Surveys and Winter Bird Surveys
- Bird surveys were conducted over all four seasons to profile species and look at the following factors:
  - Migration Patterns
  - Breeding Activity
  - Behaviour Patterns
  - Significant or Critical Habitats
- The bird surveys were conducted by establishing survey plots, visual and sound observations, and a search of habitat in the study area
- The last of the bird studies was completed in summer 2011 and data from the studies are currently being analyzed and compiled
- The results of these studies will be submitted to the MNR for review and approval as part of the Natural Heritage Assessment Report
- Findings from the natural heritage studies are being considered in the wind farm design to minimize impacts

Natural Heritage: Bats

- Properties that contain wooded areas within 120 m (394 feet) of proposed infrastructure were examined by biologists to search for suitable bat habitat
- After examining the habitats, certain properties were chosen for more extensive monitoring which involved installation of bat monitoring equipment within (or adjacent to) the wooded habitats for 10 days in June 2011 to record the number of bat passes
- These properties also required 10 nights of visual surveys, completed in mid-July 2011, which involved examining woodlands with spotlights and microphones to look for bat activity
- Bat monitoring was completed in accordance with the Ministry of Natural Resources "Bats and Bat Habitats: Draft Guidelines for Wind Power Projects (March 2010)" and will be reviewed by the Ministry of Natural Resources as part of the REA's Natural Heritage Assessment requirements
- In July 2011, the MNR issued new guidelines "Bats and Bat Habitats: Guidelines for Wind Power Projects" with more specific criteria to evaluate bat habitat. Re-assessments of all woodlands within 120m of proposed infrastructure will be completed in 2012 according to the newly updated provincial regulations
- Findings from these studies will be considered in the wind farm design to minimize impacts

Noise Studies

Noise studies will be conducted to help determine the final turbine layouts. 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 initial wind turbine layouts, 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 Environment (MOE)
- **Step 4:** Using the noise model results, turbine layouts will be revised as necessary to ensure that the final turbine layouts meet 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”

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 fisheries biologists, cultural experts, local landowners, 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. This study identifies mitigation measures to address any negative effects on the features associated with construction or operation of the turbines.

Table 1. Turbine Siting Process Constraint Categories

Constraint Category	Setback Distance*
Terrestrial Features	• 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	• Streams and Waterbodies: 30m
Local Infrastructure	• Petroleum Resource Facilities: 75m • Road Right-of-Way: 60m • Railway Right-of-Way: 60m
Socio-Economic	• Property Line: 60m • Residents 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.)

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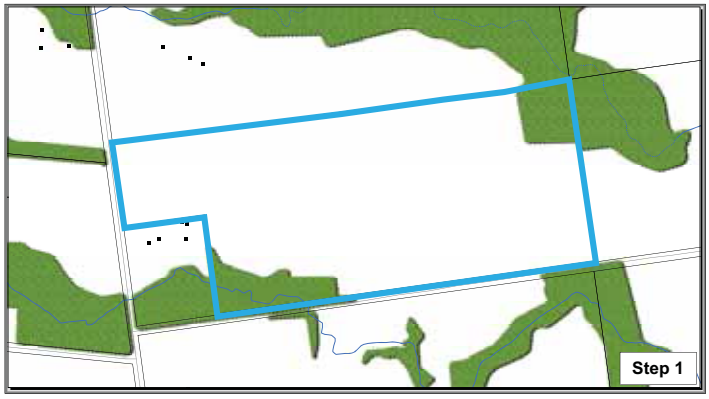
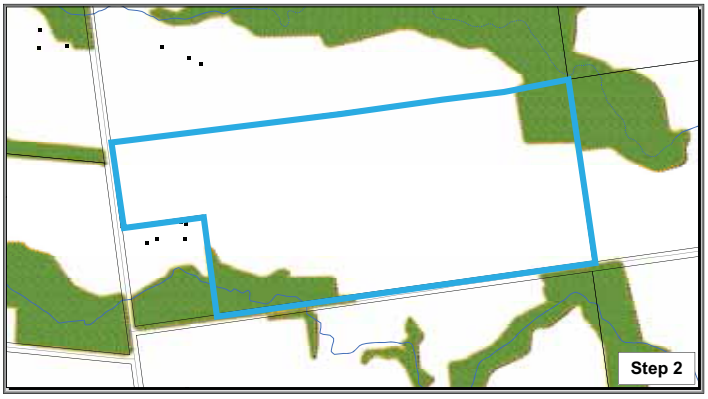
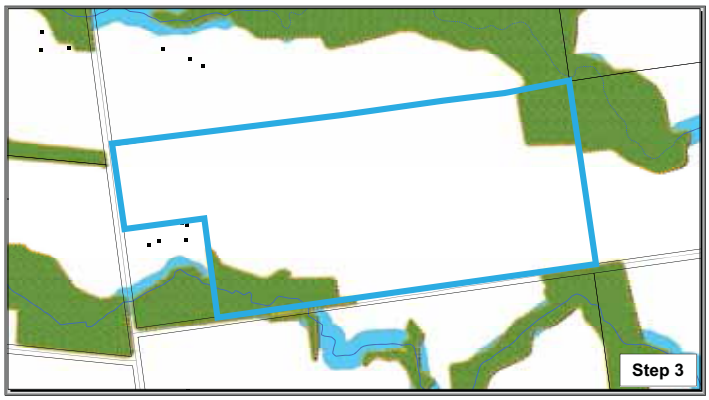
Turbine Siting Process



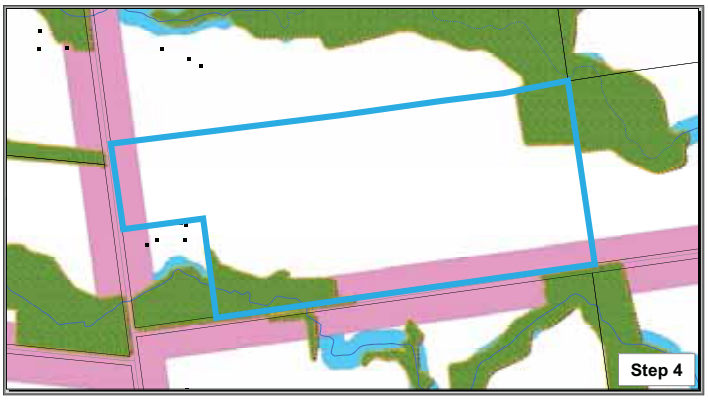
Work with local landowners to option land



Identify terrestrial constraints



Identify aquatic constraints



Identify local infrastructure constraints

Identify socio-economic constraints

Site turbine within remaining land available

Legend

Turbine Location

Terrestrial Features

Woodlots

Aquatic Features

Waterbody

Socio-Economic

Noise Receptor

Local Infrastructure

Major Road

Setback

Terrestrial Setback

Aquatic Setback

Local Infrastructure Setback

Socio-Economic Setback

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Heath 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 recently 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."
  - 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 keeping 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

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SCIENCE INTEGRITY KNOWLEDGE

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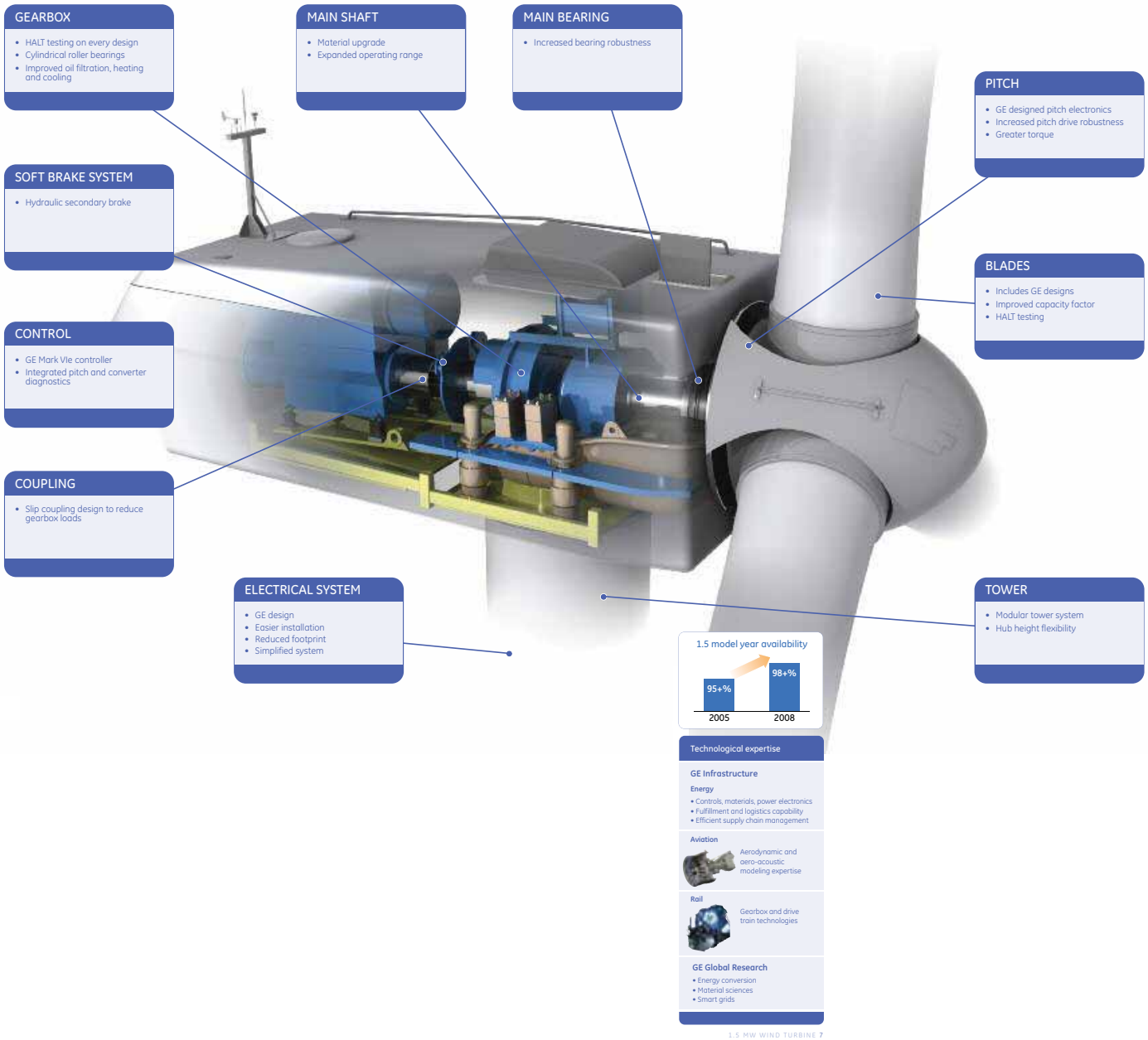
Turbine Specifications

Leading reliability and availability performance

GE's 1.5 MW wind turbine and services are designed to set the industry standard for product reliability and availability performance. GE's continual investments in technology, established infrastructure, research capabilities and globally recognized business processes allow GE to create and deliver customer value by maximizing energy capture and return on investment. This is evident through our model year performance trend where availability performance significantly improves each year.

Delivering reliability through advanced technology
To optimize turbine reliability and availability, GE focuses on reducing the number of downtime faults, and providing faster Return-to-Service (RTS). Our rigorous design and testing process—including specialized 20-year fatigue testing and Highly Accelerated Life Testing (HALT)—reflects our ongoing investment in key turbine components.



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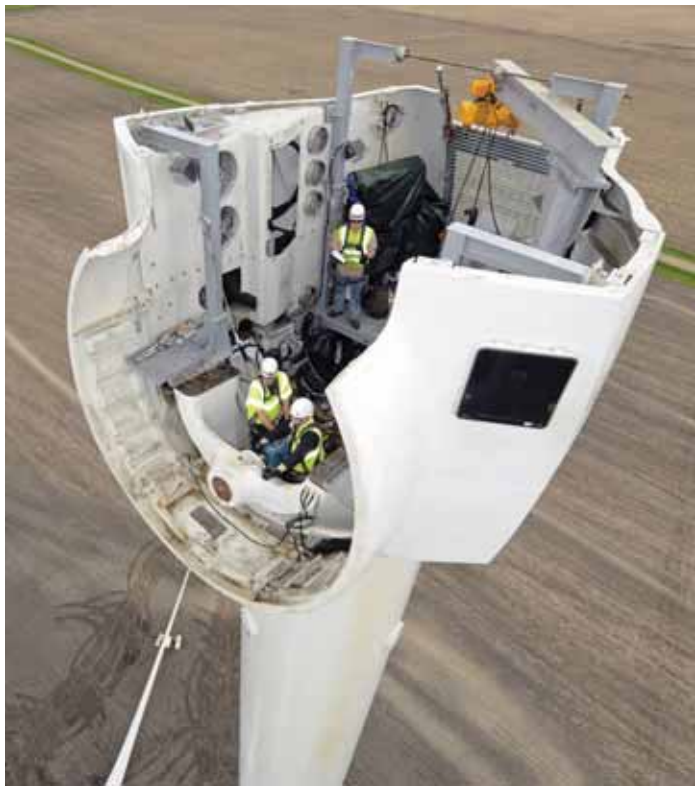
Construction Plan

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 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



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 efforts; 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 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

Decommissioning Plan

- A Decommissioning Plan is required as part of the REA approval.
- Project is expected to be operational for 25+ years
- Plan is in place to remove all turbines to the top of the foundations after 25 years
- Repair, refurbishment and replacement of turbines is typical of a preventative maintenance program
- Options exist other than decommissioning

Components to be removed:

- Turbines
- Overhead lines and poles
- Substations

- The top one metre (3 feet) of turbine foundations will be removed and replaced with clean fill and stockpiled with topsoil
- Areas will be reseeded where appropriate
- Access road removal will be dependent on the requirements of the landowner

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Thank you for Attending!

- Thank you for attending this evening's Public Meeting
- Your input is important to us: please fill out an exit questionnaire and either leave it with us tonight or mail it to us using the contact information below
- Should you have any further questions or comments, please do not hesitate to contact us:

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