

Welcome!

NextEra Energy Canada welcomes you to the Community Update Meeting regarding the Adelaide, Bornish and Jericho Wind Energy Centres.

We are here to:

- ✦ Describe the projects
- ✦ Provide you with information on the Renewable Energy Approvals process
- ✦ Answer your questions
- ✦ Consider your comments



Wind Energy Centres - 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. NextEra Energy Canada is focused on developing electricity derived from clean, renewable sources throughout the provinces. 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 to permit eight wind energy centres in Ontario.

NextEra Energy Resources

We are:

- ✦ A leading global generator of renewable energy
- ✦ The largest generator of both wind and solar power in North America operating wind energy facilities for 21 years
- ✦ 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

Did you know that NextEra Energy Resources...

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

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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 the safe and respectful access to landowner property
- ✦ Has been active in the project area 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 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

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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 county
- ✦ 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

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

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The Jericho Project

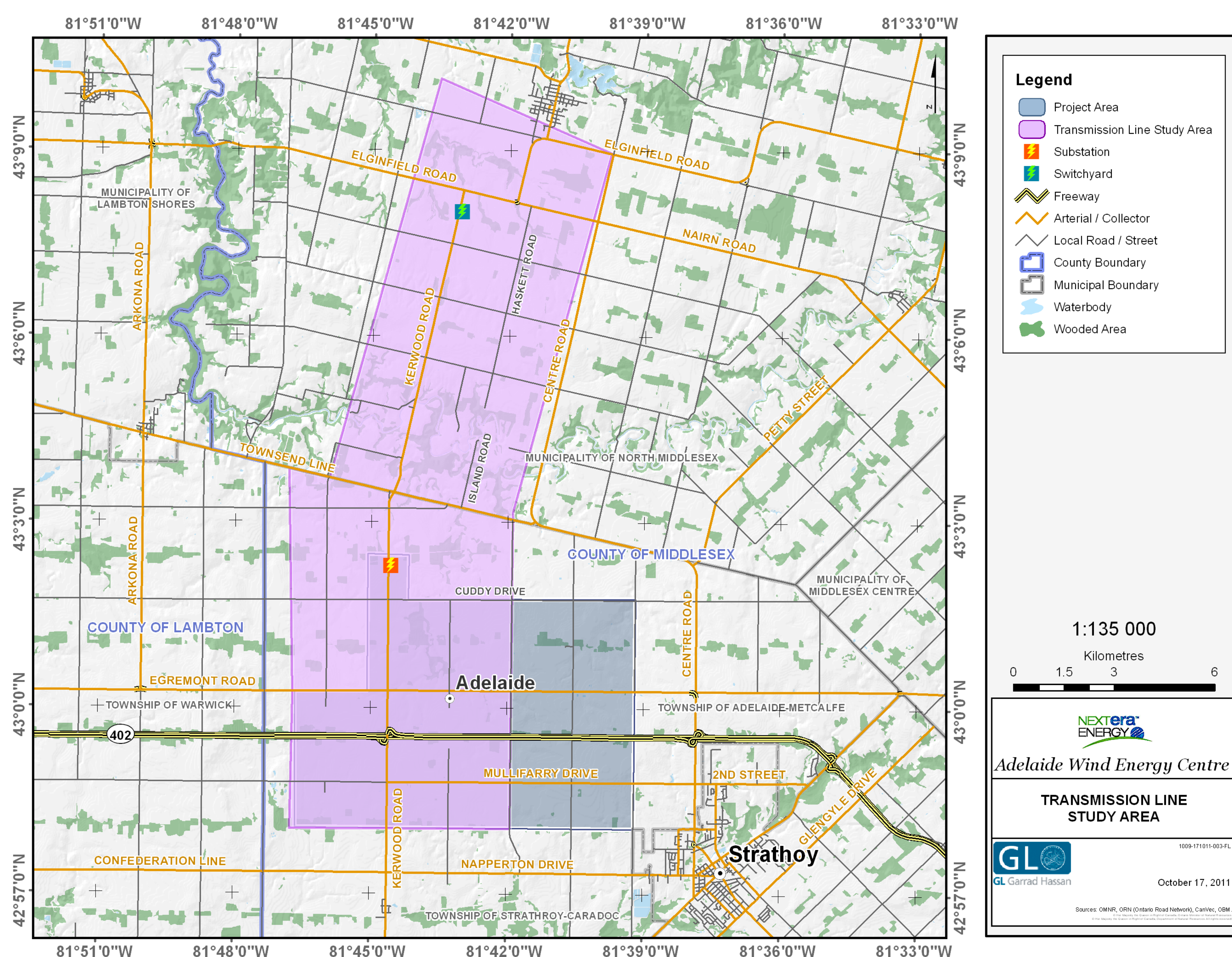
- The proposed Jericho Wind Energy Centre project is planned to be located in the Municipality of Lambton Shores, Lambton County
- The project transmission line will be located in North Middlesex, Middlesex County on private lands
- The project will have a maximum nameplate capacity of up to 150-megawatts of electricity, enough energy for nearly 37,500 homes
- Project infrastructure will include:
 - ✦ 92 1.62-megawatt GE turbines
 - ✦ Laydown and storage areas (including temporary staging areas) for construction equipment and supplies
 - ✦ A 115 kV transmission line and a transformer substation to connect to the Hydro One transmission system
 - ✦ Underground electrical collection lines (on private property) to connect the turbines to the transformer substation
 - ✦ Turbine access roads for construction and maintenance
 - ✦ Permanent meteorological tower(s) during operation to measure wind speeds, wind direction, temperature and humidity
 - ✦ An operations and maintenance building



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The Adelaide Project

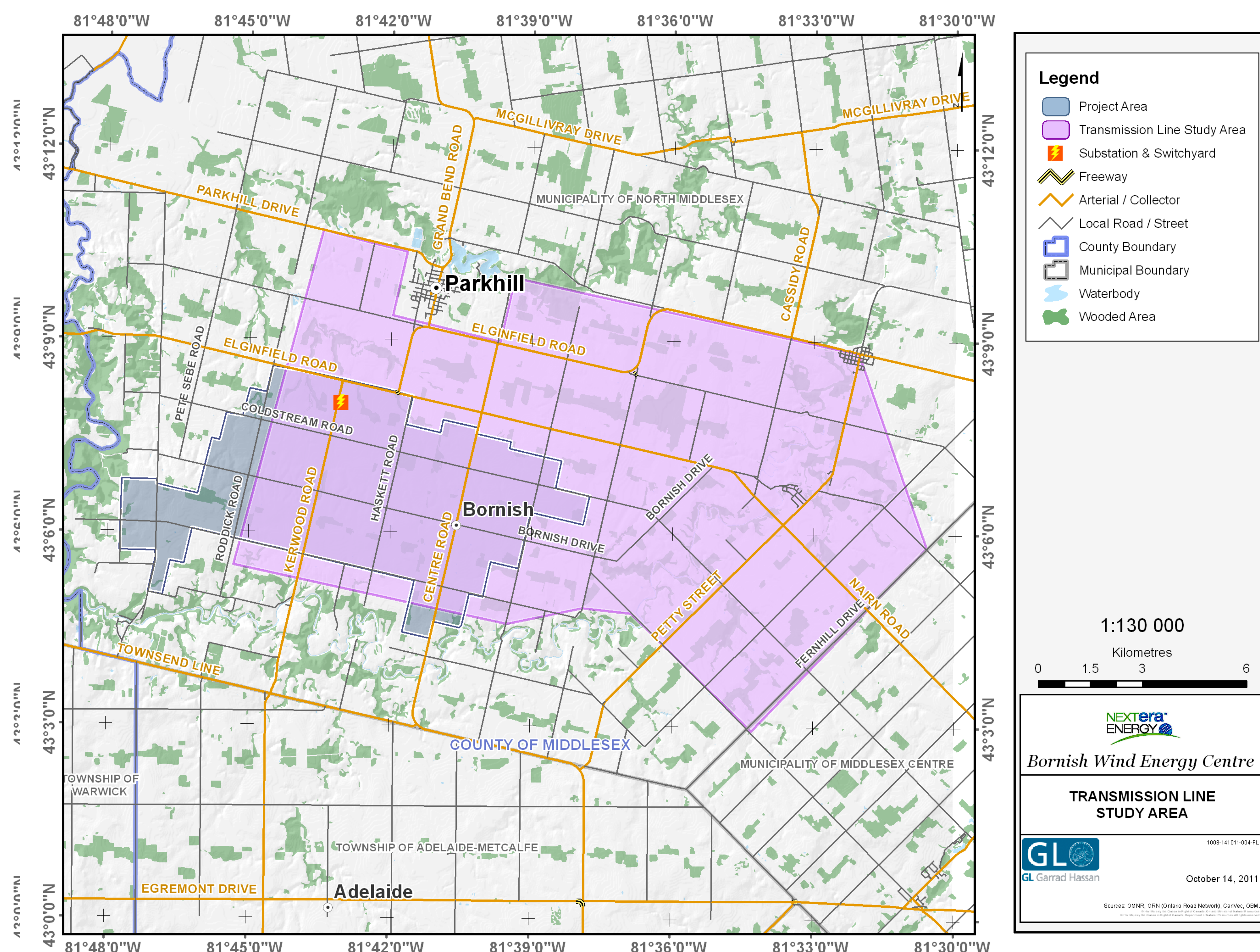
- The proposed Adelaide Wind Energy Centre is planned to be located in the Township of Adelaide-Metcalfe, Middlesex County, Ontario
- Project components will be installed on privately-owned agricultural lots. The project has a maximum nameplate capacity of up to 60-megawatts which will generate enough electricity to power approximately 18,000 homes
- Project infrastructure will include:
 - ✦ 38 1.62-megawatt GE turbines
 - ✦ 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 into the Municipality of North Middlesex to a substation to be located east of Kerwood Road and south of Elginfield Road
 - ✦ Underground electrical collection lines, (located on private lands) to collect the turbines to the transformer
 - ✦ Turbine access roads for construction and maintenance
 - ✦ Permanent meteorological towers during operations (height 80-100 m) to measure wind speeds, wind direction, temperature and humidity
 - ✦ An operations and maintenance building



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The Bornish Project

- The proposed Bornish 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 73-megawatts of electricity which will generate enough energy to power approximately 21,870 homes
- Project infrastructure will include:
 - ✦ 45 1.62-megawatt GE turbines
 - ✦ 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 east along Elginfield and Nairn Roads, connecting to the Hydro One transmission system
 - ✦ Underground electrical collection lines (located on private lands) to connect the turbines to the transformer substation
 - ✦ Turbine access roads construction and maintenance
 - ✦ Permanent meteorological towers (height 80-100m) to measure wind speeds, wind direction, temperature and humidity
 - ✦ An operations and maintenance building



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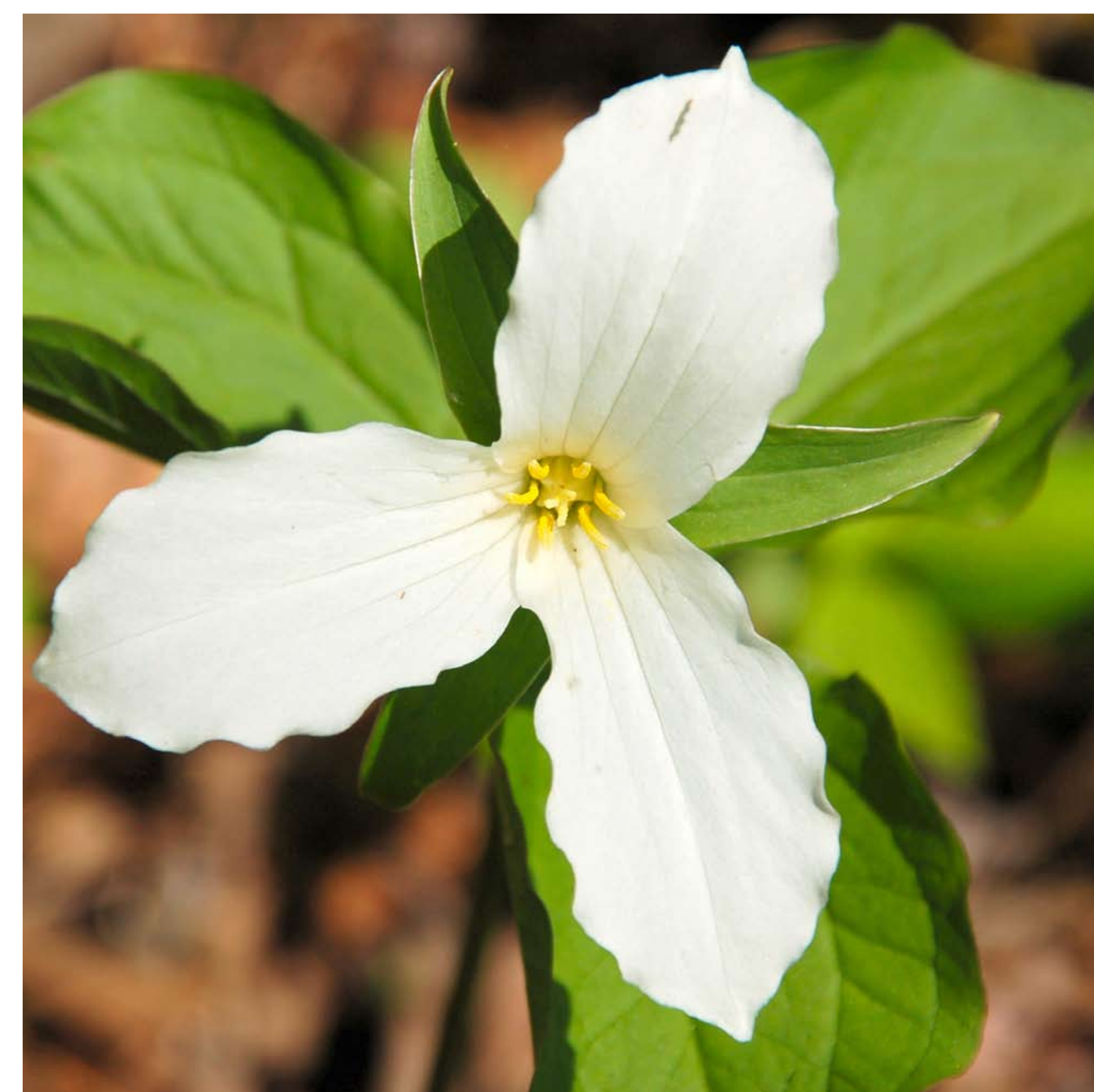
Renewable Energy in Ontario

The Green Energy and Green Economy Act

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

Key Components:

- A provincial obligation to purchase green energy
- Priority grid access for renewable energy projects
- Long-term fixed-price power contracts
- Streamlined 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 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

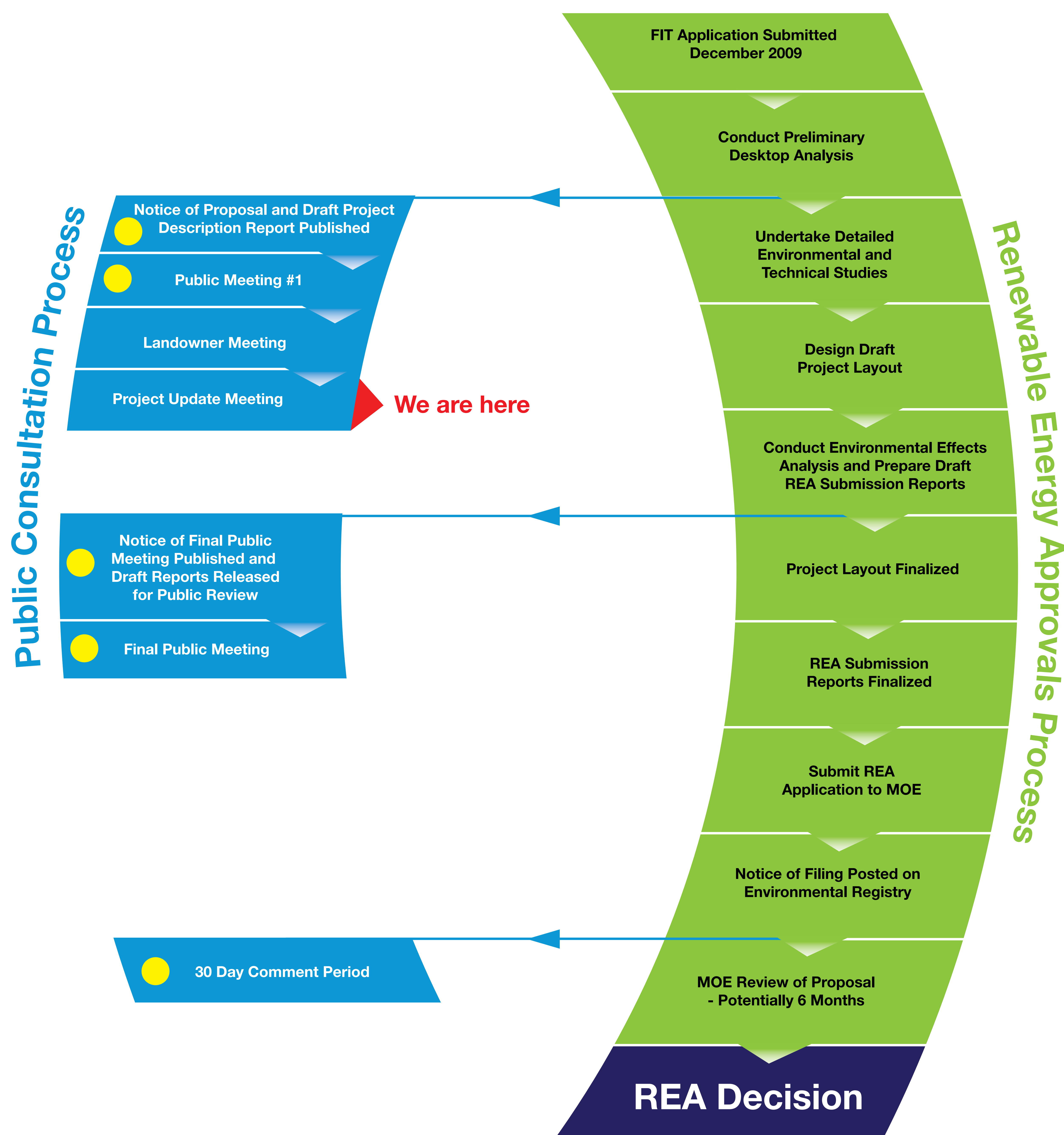
- The Renewable Energy Approval (REA) process, outlined in Ontario Regulation 359/09, is required for larger wind power projects under Ontario's Green Energy Act
- NextEra Energy Canada will submit a Renewable Energy Approval application to the Ontario Ministry of the Environment (MOE) for each project
- 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:

- ✦ **Archaeology and Cultural Heritage Assessment** – 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 the public and Aboriginal communities throughout the development of the project
- ✦ **Wind Turbine Specifications** – to describe the turbine technology selected for the project
- ✦ **Project Description Report** – to provide an overview of the project and a summary of all the required REA reports

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Renewable Energy Approvals 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 – Jericho Project

- The work is being completed by licensed archaeologists according to Ministry of Tourism and Culture 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 additional archaeological resources may be found within the study area
- A Stage 2 Archaeological Assessment commenced in April 2011 after the snow had melted and when the ground was firm enough to walk
 - ✦ Archaeologists conducted 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 the archaeological site
- Upon completion, a full 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



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Archaeological Studies – Adelaide Project

- The work is being completed by licensed archaeologists according to Ministry of Tourism and Culture 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 the fall 2008 to determine if archaeological resources may be found within the study area
- A Stage 2 Archaeological Assessment conducted between September and December 2008
 - ✦ Archaeologists conduct pedestrian surveys to identify/collect any artifacts found in areas of potential disturbance
- The Stage 2 Assessment resulted in the documentation of 13 archaeological locations
 - ✦ Nine of these locations are pre-contact Aboriginal sites and four are historic Euro-Canadian sites
 - ✦ Three of the nine pre-contact Aboriginal sites and three of the four historic Euro-Canadian sites recorded were recommended for a Stage 3 Archaeological Assessment
- A Stage 3 Archaeological Assessment was conducted in 2010 and only one site required further archaeological assessment – this Stage 4 Assessment has not yet been conducted; however the MTC accepts that until this has been completed, the site will be enclosed by a snow fence at a 20m buffer extending beyond the limits of the site
- The Adelaide Wind Energy Centre project layout was modified, requiring additional Stage 2 archaeological studies, which are currently being conducted and submitted to the MTC for review
- Upon completion, a full 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

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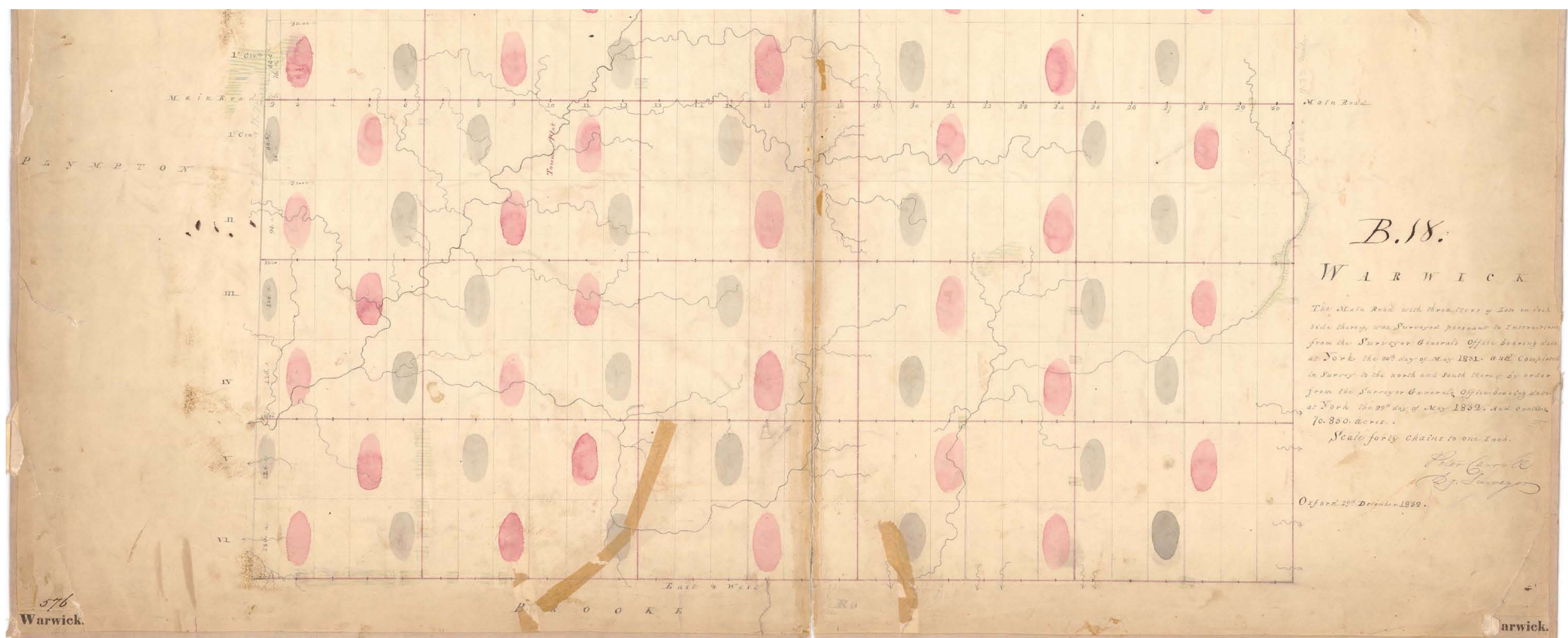
Archaeological Studies – Bornish Project

- The work is being completed by licensed archaeologists according to Ministry of Tourism and Culture 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 2009 to determine if archaeological resources may be found within the study area
- A Stage 2 Archaeological Assessment was conducted in June 2009
 - ✦ Archaeologists conducted pedestrian surveys to identify/collect any artifacts found in areas of potential disturbance
- The Stage 2 Assessment resulted in the documentation of 33 archaeological locations
 - ✦ 29 locations are pre-contact Aboriginal sites and four are historic Euro-Canadian sites
- Upon completion of the Stage 2 Assessment it was determined that most of the sites could be avoided and only three pre-contact Aboriginal sites were to be subjected to additional Stage 3 Archaeological Assessment
- Subsequent to the June 2009 studies, the Bornish Wind Energy Centre layout was modified requiring additional Stage 2 studies – these are currently being conducted and the results will determine if further evaluation is required
- Upon completion, a full 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

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Cultural Heritage – Jericho 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 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 Jericho Study Area
- At least 40 sites, 50 potential built heritage resources and approximately three 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

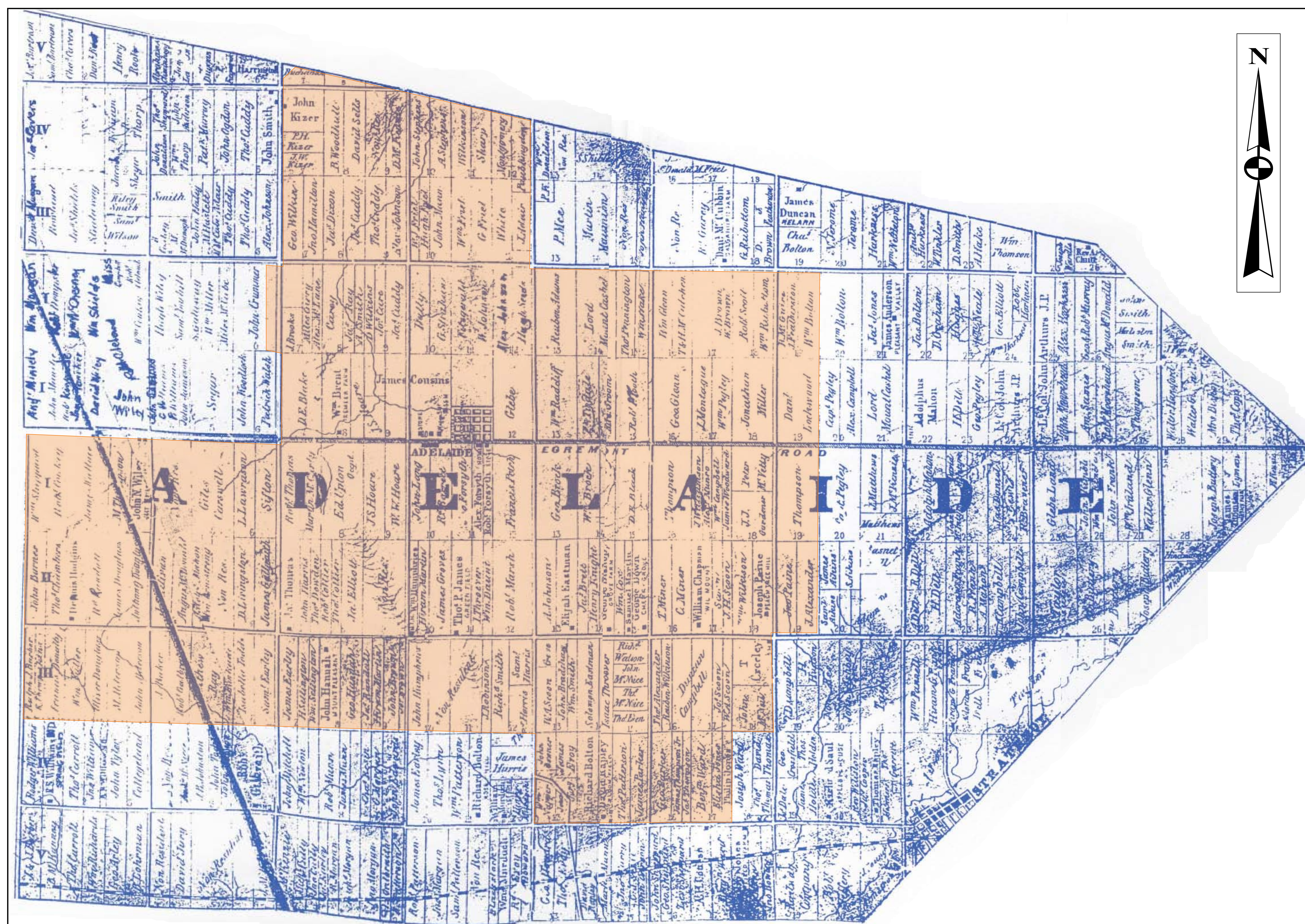


Historical Mapping of Study Area

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Cultural Heritage – Adelaide Project

- A Cultural Heritage Assessment for the Adelaide Wind Energy Centre was carried out in 2009 to assess built heritage resources and cultural heritage landscapes in the study area
- A completed Built Heritage and Cultural Landscape study was submitted to the MTC, Culture Division, for review in 2010
- The report indicated that 47 structures were identified to be greater than 40 years old, of which 42 (27 houses and 15 barns) were determined to have general historical significance
- The MTC concluded that none of these structures was determined to have cultural heritage value or interest
- Subsequent to the MTC letter, the footprint of the Adelaide Wind Energy Centre has been reduced. A letter of amendment will be submitted to the MTC to reflect these changes for their review and acceptance

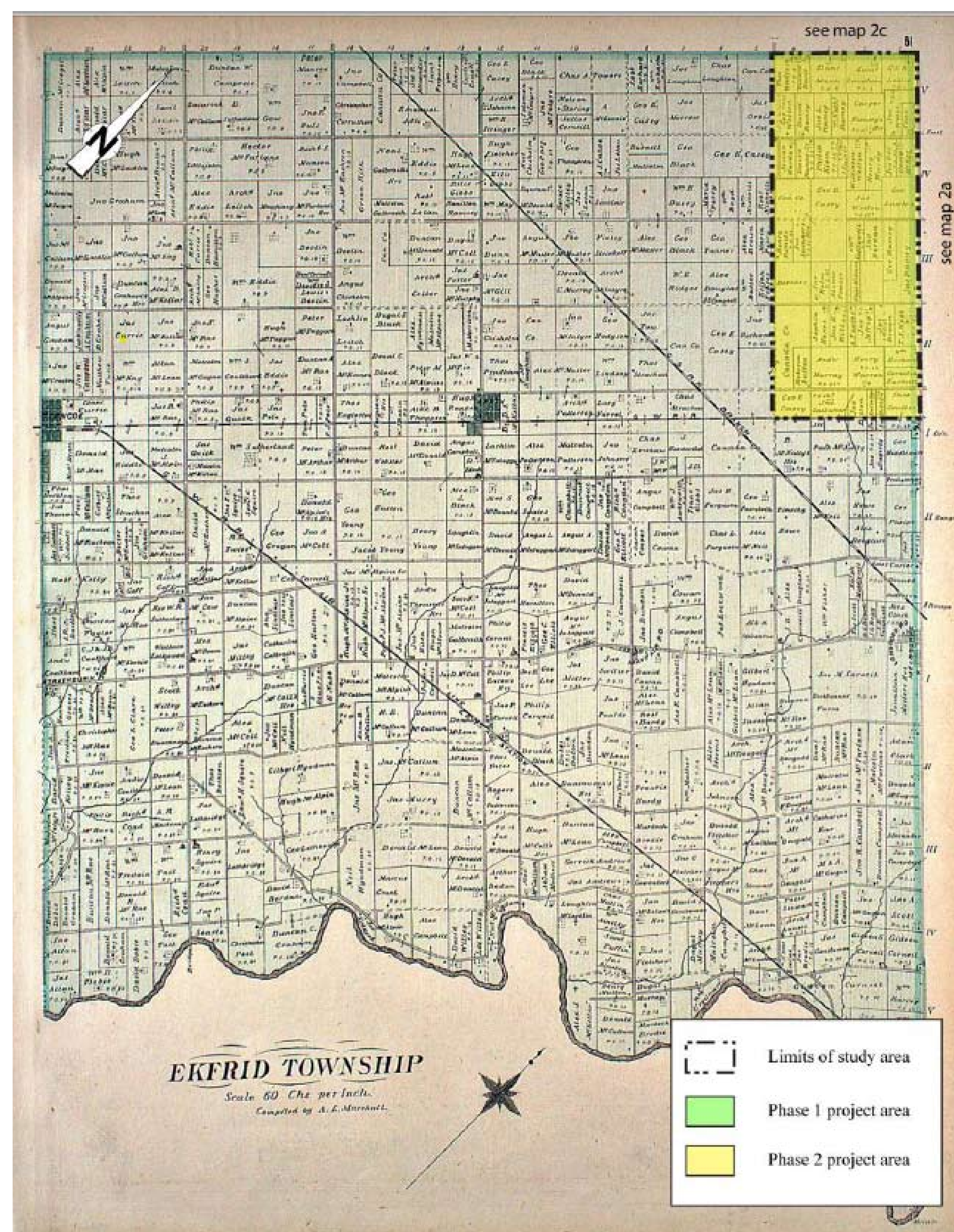


Historical Mapping of Study Area

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Cultural Heritage – Bornish Project

- A Cultural Heritage Assessment is currently being carried out to assess built heritage resources and cultural heritage landscapes located within the study area
- Upon completion, a comprehensive report of the findings will be generated and submitted to the MTC for the review and comment
- Findings from the cultural studies will be considered in the wind farm design to minimize impacts as much as possible



Historical Mapping of Study Area

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Natural Heritage: Water – Jericho Project

- 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 as much as possible
- 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 (Ausable-Bayfield Conservation Authority, St. Clair Region Conservation Authority, and the Ministry of Natural Resources)



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Natural Heritage: Water – Adelaide Project

- Aquatic studies for the Adelaide Wind Energy Centre have been underway since September 2011
- This work requires that aquatic biologists visit watercourses within 120 m (394 feet) of any proposed project infrastructure and conduct investigations to:
 - ✦ Measure stream width and depth
 - ✦ Characterize vegetation cover, substrate composition and water flow patterns
 - ✦ Observe the presence of fish and/or 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 as much as possible
- Studies conducted to date suggest that aquatic habitat is not of high quality on this site and no Species of Concern are expected to be impacted by the project.
- GL Garrad Hassan (independent consultant) will submit a Water Assessment and Water Body Report to the Ministry of the Environment that will outline potential effects, proposed mitigation measures, monitoring commitments and determine the significance of residual effects
- NextEra Energy Canada will obtain all applicable permits from the appropriate approval agencies (Ausable-Bayfield Conservation Authority, St. Clair Region Conservation Authority, and the Ministry of Natural Resources)



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Natural Heritage: Birds – Jericho Project

- 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 is 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 as much as possible



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Natural Heritage: Birds – Adelaide Project

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- 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, 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 June 2011, data from the studies is currently being analyzed and compiled
- The results of these studies will be submitted to the Ministry of Natural Resources for review and approval as part of the Natural Heritage Assessment Report
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Natural Heritage: Birds – Bornish Project

- 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 Bornish Wind Energy Centre have included Breeding Bird Surveys and Winter Bird Surveys, which were completed in 2007 and 2011
- Bird surveys were conducted over two seasons to profile species and look at the following factors:
 - ✦ Migration Patterns
 - ✦ 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 June 2011 and data from the studies is currently being analyzed and compiled
- The findings of these studies will be submitted to the Ministry of Natural Resources for review and approval in the Natural Heritage Assessment Report
- Findings from the natural heritage studies are being considered in the wind farm design to minimize impact as much as possible



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Natural Heritage: Bats – Jericho Project

- Bat studies were completed in mid July 2011
- Properties that contained 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 installing bat monitoring equipment within (or adjacent to) the wooded habitats for 10 days in June to record the number of bat passes
- These properties also required 10 nights of visual surveys which involved examining woodlands with spotlights and microphones to look for bat activity
- 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 will be reviewed by the Ministry of Natural Resources as part of the REA’s Natural Heritage Assessment requirements
- In July 2011, the Ontario Ministry of Natural Resources 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 according to the newly updated provincial regulations
- Findings from these studies will be considered in the wind farm design to minimize impacts as much as possible



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Natural Heritage: Bats – Adelaide Project

- Bat studies for the Adelaide Wind Energy Center were completed in July 2011
- Properties that contained wooded areas within 120 m (394 feet) of proposed infrastructure were examined by biologists to search for suitable bat habitat
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- 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. Re-assessments of all woodlands within 120m of proposed infrastructure were completed according to the newly updated provincial regulations
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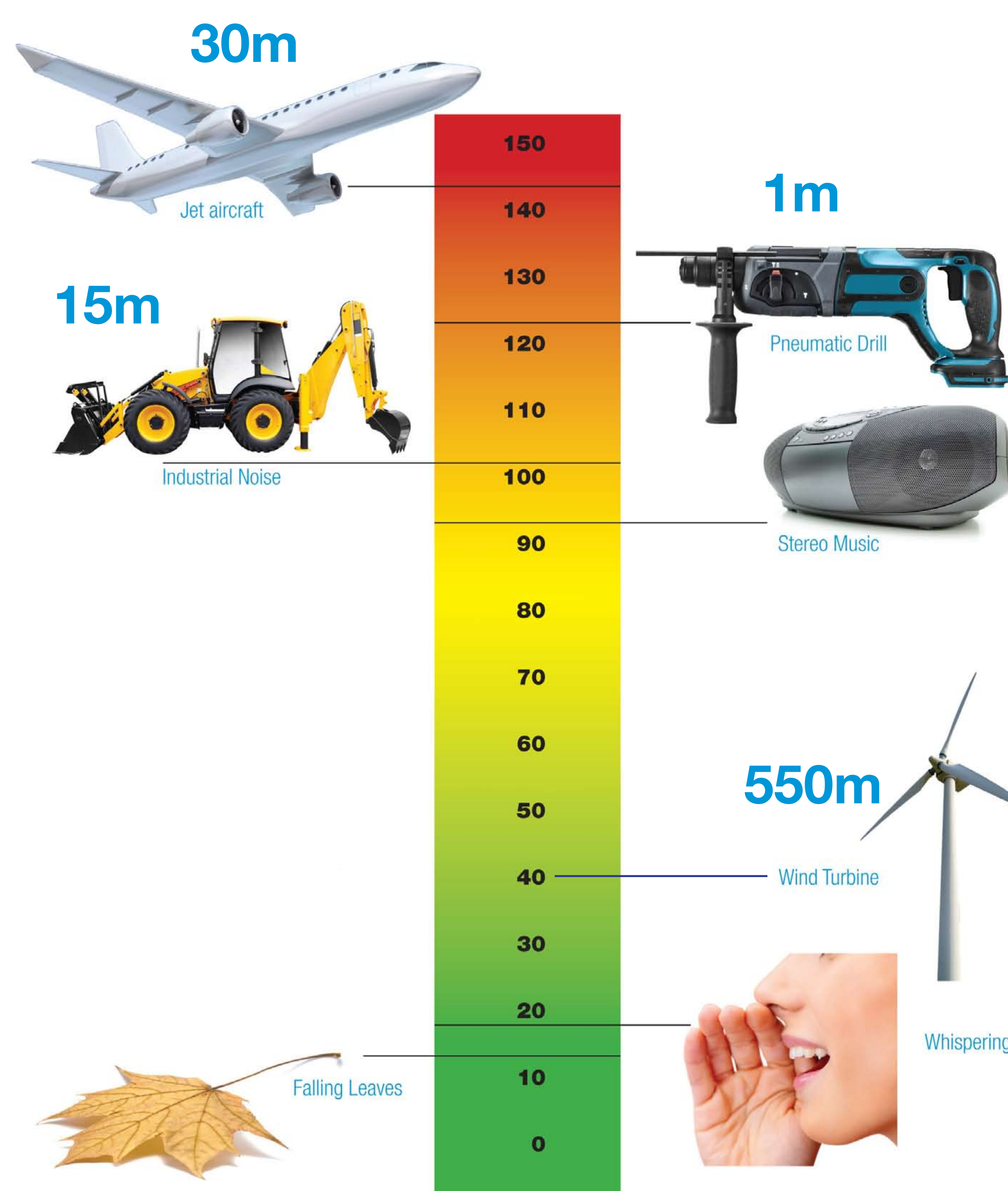
Noise Studies

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”



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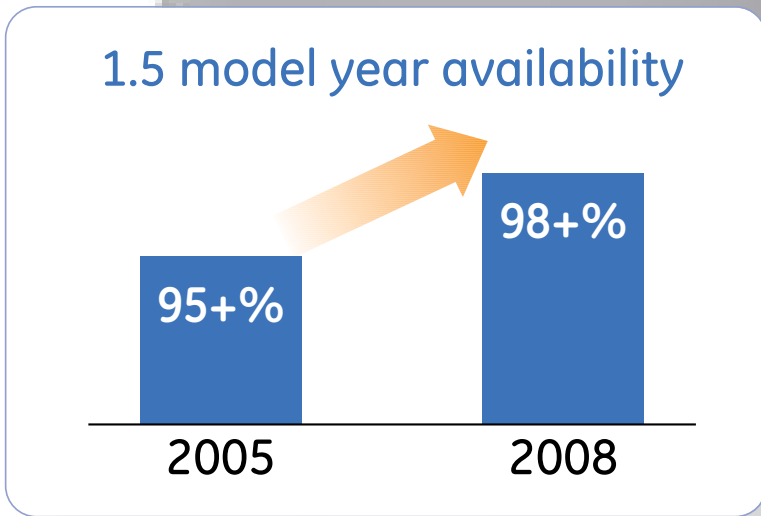
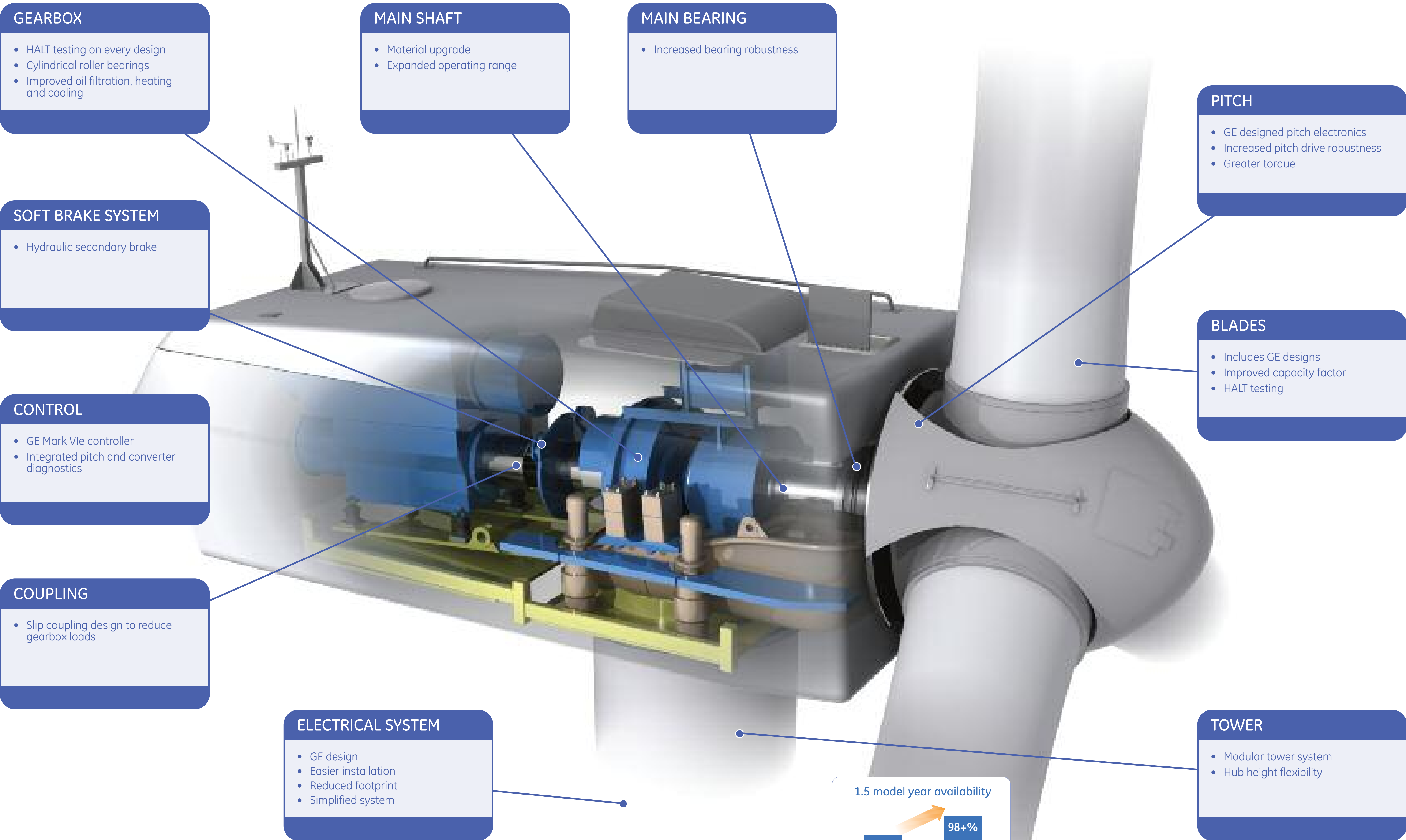
Turbine Specifications

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.



Technological expertise	
GE Infrastructure	
Energy	
• Controls, materials, power electronics	
• Fulfillment and logistics capability	
• Efficient supply chain management	
Aviation	
	Aerodynamic and aero-acoustic modeling expertise
Rail	
	Gearbox and drive train technologies
GE Global Research	
• Energy conversion	
• Material sciences	
• Smart grids	

1.5 MW WIND TURBINE 7

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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



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Construction Plan

Electrical Collector System:

- ✦ This system consists of a mixture of underground cables, overhead lines, 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 the landowners

Wind Turbines:

- ✦ Foundations will be made of a 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)
- ✦ 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 concrete
- ✦ 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 constructed on privately held lands, and be used to monitor the day-to-day operations of the wind farm and maintenance efforts
- ✦ 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

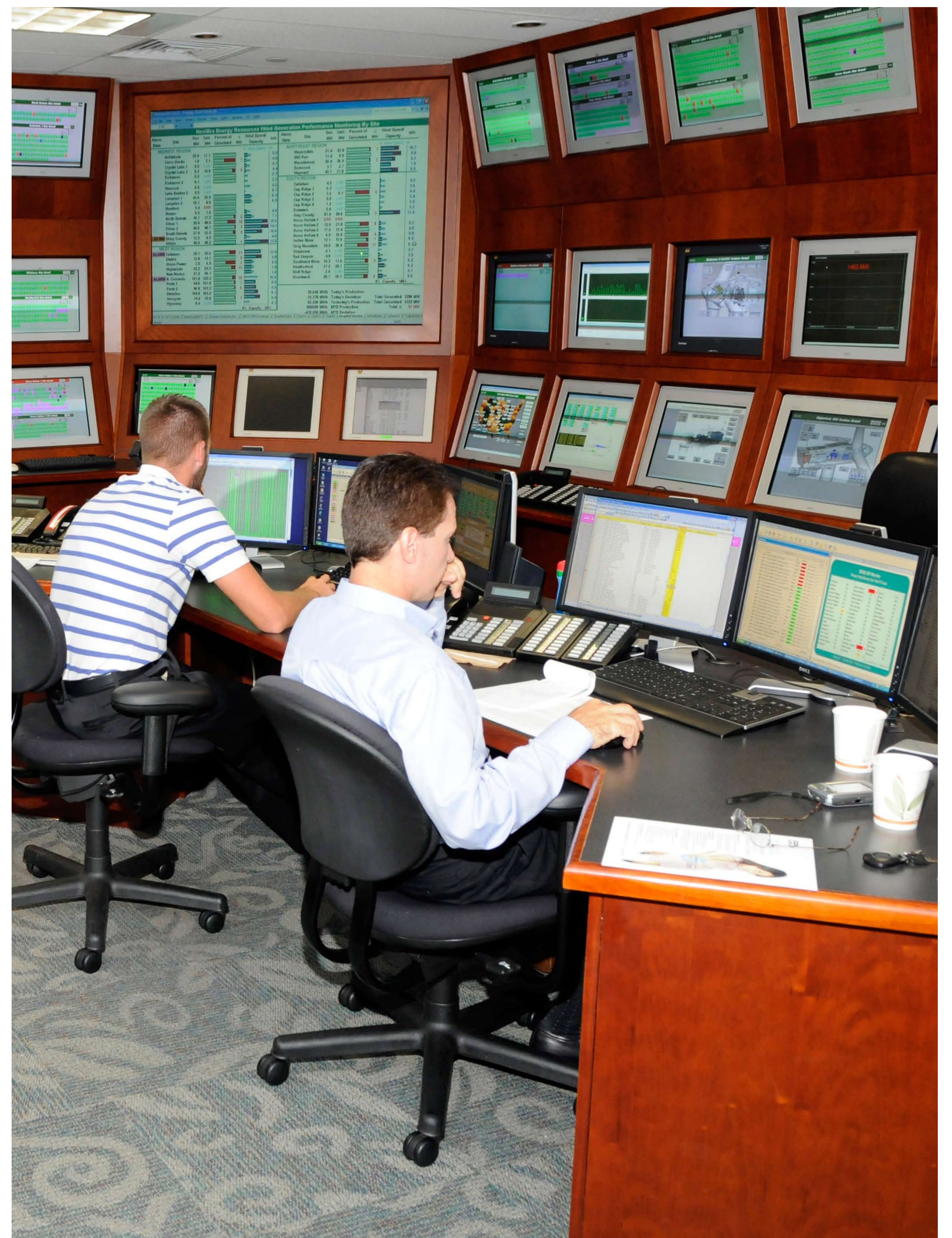


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Operations and Maintenance

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 your questions and address concerns



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Decommissioning Plan

- Project is expected to be operational for 25+ years
- Plan is in place now 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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Transmission Approvals Process

- Transmission lines (lines with voltages higher than 50kV) 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, ensuring that the priorities given to the Ontario Energy Board by the government are met – namely that the project is of benefit to the ratepayer (the public)
- In addition to the Leave to Construct process, the lines will be permitted as part of the Renewable Energy Approval process



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Transmission Route Overview

- NextEra Energy Canada proposes to build approximately 26 kilometres of 115 kV transmission line to transport electricity generated by the Adelaide, Bornish and Jericho wind projects to a common switchyard located within the Bornish project.
- Power produced from the Jericho project will travel approximately 14.5 km from the Jericho substation to the switchyard
- Power produced from the Adelaide project will travel approximately 11.4 km from the Adelaide substation to the switchyard
- Power generated by the Bornish project will be delivered from its substation to the neighboring switchyard.
- Power combined at the switchyard will then be delivered via a 115 kV transmission line to an existing 500kV transmission line located approximately 11.5 kilometres east of the switchyard.

Selecting a Transmission Route

- Distances between the transmission line and other structures are considered when selecting a route.
- Wherever possible, poles will be placed within the road right of way with installation and maintenance from the road.
- Easement widths located on private property will vary between 33 – 200 feet (10 – 60 metres). Widths may vary due to special features of a particular parcel.
- The location of environmentally sensitive features is considered when choosing a route.

Land Owners and Easement Agreements

- NextEra Energy Canada is committed to working with landowners within the corridor to find a mutually acceptable route for the transmission line.
- Land owners will be paid a fair market value for the property subject to the easement.
- Compensation will be made for crop damage
- Additionally, we will repair damages to fences, gates, tiling, roads, etc.

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Construction of a Transmission System

The construction of the transmission systems are being considered on municipal right of ways, 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).
- Wherever practical, transmission and distribution will be co-located on a single pole.
- Transmission lines are required to be constructed to standards outlined by the Province and/or electrical codes.

Leave to Construct 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.
- In addition to the Leave to Construct process, the lines will be permitted as part of the Renewable Energy Approval (REA) processes for the Bornish, Adelaide and Jericho wind energy centres
- Natural heritage studies have been conducted along proposed routes within the transmission study area including:
 - ✦ Vegetation mapping and habitat assessments
 - ✦ Aquatic habitat assessments
 - ✦ Breeding bird surveys in open and forested habitats
- Any additional studies that may be required as a result of route selection will be conducted prior to construction



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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

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Thank You for Attending!

- Thank you for attending this evening's Community Update Open House
- 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

- **E-mail:**

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

Phone: 1-877-257-7330

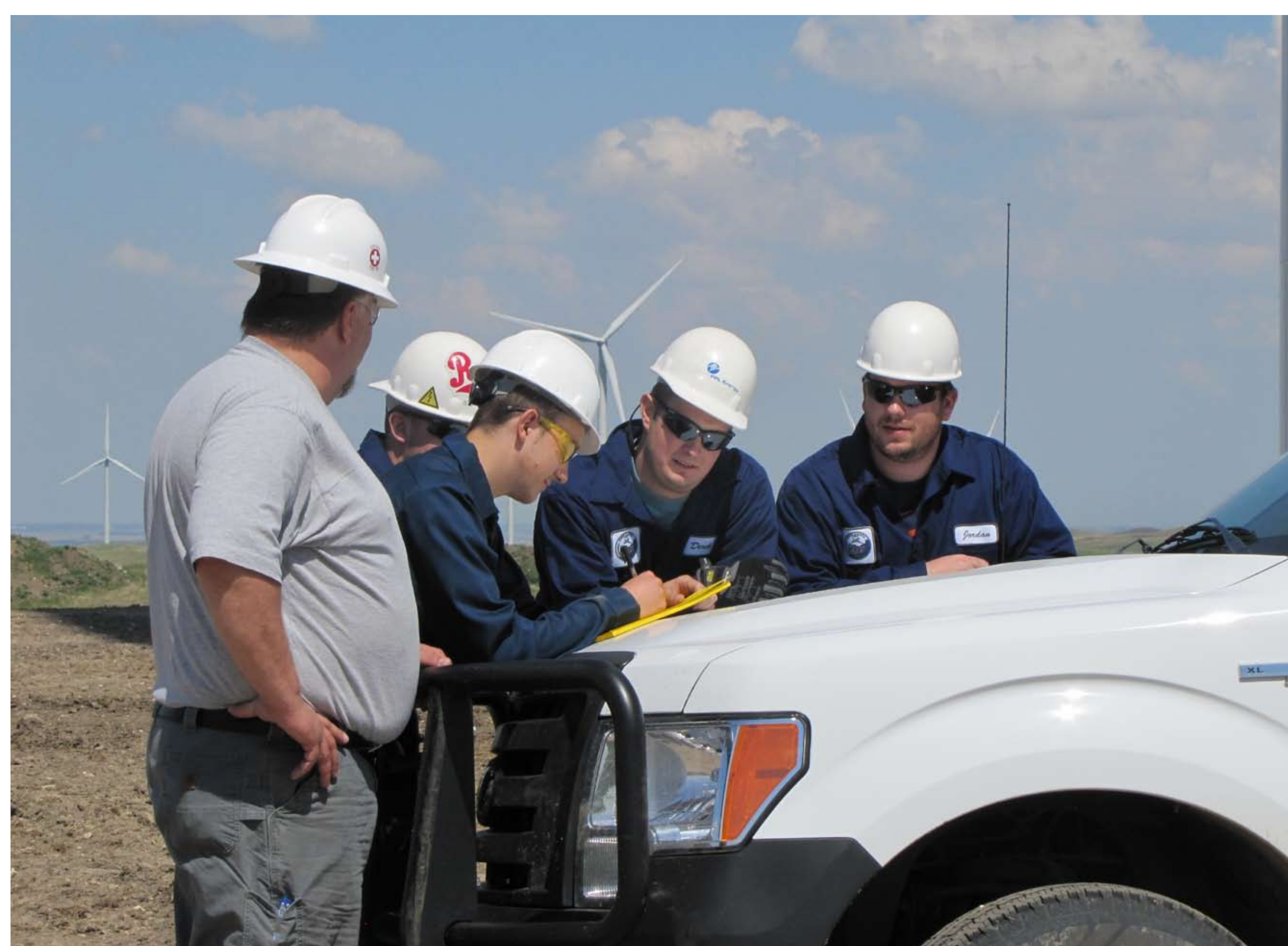
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