

# NextEra Energy Canada Bornish Wind Energy Centre

Community Liaison Committee (CLC): Meeting #4

April 8th, 2015 6:00 p.m. to 8:00 p.m.

North Middlesex Community Centre  
225 McLeod  
Parkhill, ON

**NOTE:** This meeting package was compiled by the CLC Coordinators and Facilitators (AECOM) and as such may be subject to clarification or correction by NextEra Energy Canada and its technical staff/specialists. The CLC members will be notified of any revisions to the meeting package, and the final package will be posted and available for public review on NextEra Energy Canada's website.



# Agenda

1. Introductions
2. Recap of CLC Meeting # 3
  - Construction process
  - Operations Overview
  - Public Attendance and Depositions
3. Parking Lot Items and any Questions/Comments Raised since the Third CLC Meeting
4. Update on Post-Construction Activities
5. Monitoring and Mitigation Measures
6. Retirement and Decommissioning Process
7. Question and Answer Period (15 minutes)
8. Ongoing Access to Information or Providing Input
9. Conclusion of the CLC
10. Depositions, if any requests received

# Introductions

## **CLC Members:**

- Jack Willemse
- Mark Cadman
- Lucy Hendrikx
- Barb Shea
- Muriel Allingham
- Robert Lewis
- Chuck Hall
- Gary Zavitz
- Adrian Cornellison
- Dean Jacobs

## **CLC Coordinators and Facilitators (AECOM):**

- Avril Fiskien
- Adam Wright

## **NextEra Energy Canada:**

- Catie Mitchell, Business Management
- Julie Rice, Director, Business Management
- Jeff Damen, Construction
- Andrea Garcia, Environmental Services
- Doug McIntosh, Regional Operations Manager

## **Consultants**

- Andrew Ryckman, NRSI

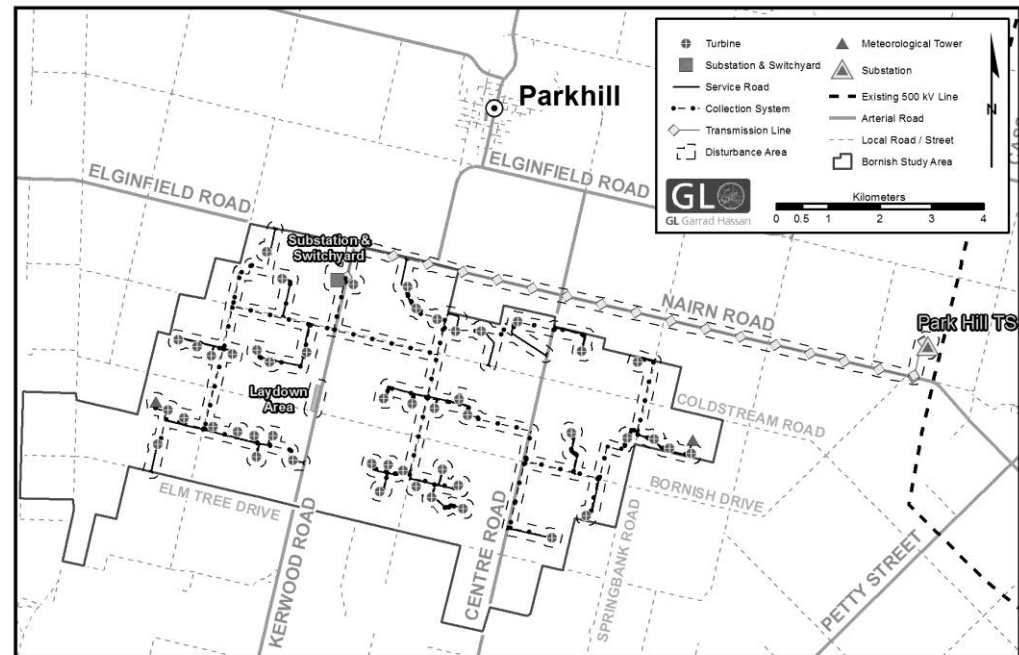
# Recap: CLC Meeting #3

## Purpose of the CLC:

- A forum for two-way communication between NextEra Energy Canada and the public
- An opportunity to provide additional information and updates, and to respond to questions or concerns related to:
  - Construction and installation
  - Use and operation
  - Maintenance
  - Retirement of the Facility

## Project Overview:

- Class 4 Wind Facility
- Located in the Municipality of North Middlesex in Middlesex County
- 45 turbines, w/ 80 metre towers and 50.5 metre blades
- Generating capacity of 72.9 MWs
- Status of background studies and approvals.
- Outline of construction process



## Public Attendance and Depositions:

- Local residents in attendance.
- No depositions

# Recap: CLC Meeting #3

## Meeting Summary for our 3rd CLC Meeting:

- Draft minutes were prepared by AECOM and circulated to the CLC on **January 20, 2015**
- Members were asked to advise AECOM of any errors, omissions or changes by **February 3, 2015**
- All recommended comments/changes were incorporated and the minutes were posted on NextEra's publically accessible website on **February 6, 2015**
- CLC members were also emailed the final minutes on **February 6, 2015**

# Recap: CLC Meeting #3 – Post-Construction and Operations

- **Construction Clean up, Modifications and Road Repairs: July 2014 onward**
- **Reclamation: August 2014 to Spring 2015**
- **Wind Turbine Commissioning: August 15, 2014**
- **Operations Update and Maintenance Scheduling**
- **Operations – Complaint Resolution process**
- **Monitoring and Mitigation Measures**



# CLC Meeting #3 – Parking Lot Items

**See separate attachment.**

# Status of Post-Construction Activities

## 1) Modifications and Road Repairs: largely complete

- NextEra is complete with its physical restoration work but has an agreement in place with Middlesex County to pay for the restoration of key roads that were used during construction.

## 2) Reclamation: (August to Spring 2015)

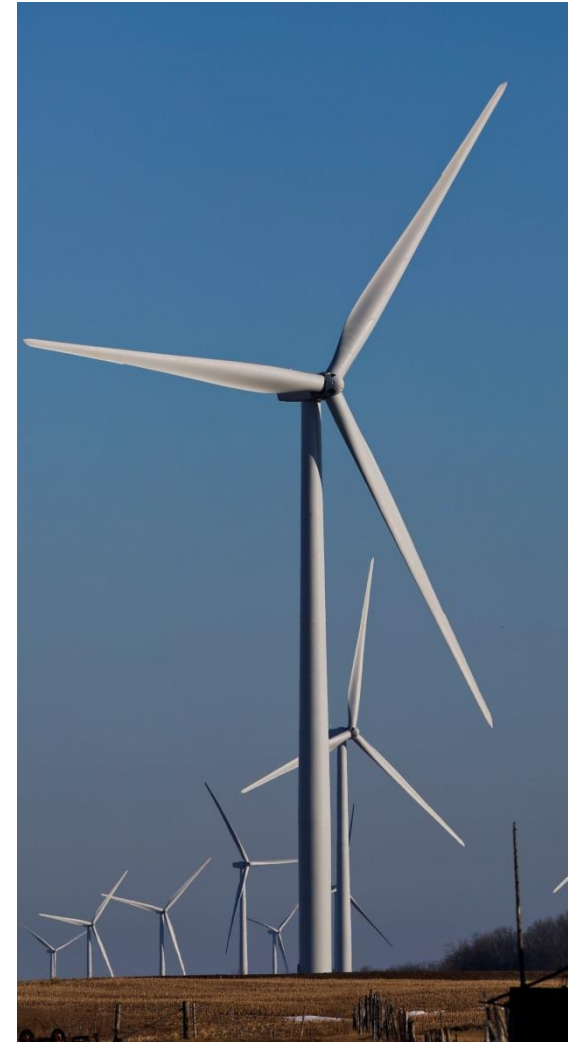
- Stripped soil will be replaced and re-contoured in the construction areas and disturbed areas will be reseeded during appropriate conditions for germination (as seasonality allows).



# Update on Operations

## Wind Energy Centre Reached Commercial Operation: August 15, 2014

- Operations and Maintenance building located in Parkhill
- Over 137,000 megawatt hours of wind energy has been produced since commercial operation. The average home uses approximately 1 megawatt (1 million watts) of energy each month.
- The facility has been operating extremely well with an Availability Factor > 99%.
- Bornish Wind employs 5 Full Time employees as well as more than a dozen shared specialists in Ontario.
- Operations staff have completed the required 500 hour “Break In” maintenance on all turbines and the first scheduled service project is in progress.



# Operations – Complaint Resolution:

- NextEra acknowledges that some members of the community may have concerns regarding construction activities and long-term wind farm operations.
- To resolve disputes in a collaborative manner, NextEra follows its complaints resolution process.
- Should any complaints arise throughout the course of the construction, operation and decommissioning phases, a NextEra representative will contact the complainant to understand and seek a resolution.
- NextEra will **notify the local MOE** (Ministry of Environment) **district office** of the complaint **within 2 business days** of receipt of the complaint (**1 business day** if the complaint is related to **Ground Water**).
- The MOE notification will include:
  - Description of the nature of the complaint;
  - Wind direction at the time of the incident related to the complaint;
  - Time and date of the incident related to the complaint; and
  - A description of the measures taken to address the cause of the incident and to prevent a similar occurrence in the future

## Operations – Complaint Resolution, cont'd:

- NextEra will provide the local MOE district office with a written records of the complaint **within 8 business days** of the complaint.
- As soon as possible, **no later than three (3) days** call complainant to follow up.
- Prepare letter to respond to customer/citizen and mail **within 5 days of receiving complaint**.
- Information requests and complaints about the local operations and maintenance can be addressed to:

**NextEra Energy Canada, LP**

**390 Bay Street, Suite 1720**

**Toronto, ON M5H 2Y2**

**Toll Free Phone: 1-877-463-4963**

**Main Office Line: 416-364-9714**

**Email: [bornish.wind@nexteraenergy.com](mailto:bornish.wind@nexteraenergy.com)**

**Website: [www.NextEraEnergyCanada.com](http://www.NextEraEnergyCanada.com)**

# Monitoring and Mitigation Measures

- **Species-At-Risk (SAR) Monitoring**

- Annual Report on the **2014** Species at Risk mortality monitoring has been prepared. **(Not required to be submitted to the MNR, it is required that we keep it on file at the site).**
- All 45 turbines were searched monthly
- **No Species at Risk mortalities were observed in 2014.**
- Species at Risk Monitoring continues for the life of the project
- 2015 Species at Risk monitoring will begin May 1 and continue through October 31

- **Bird and Bat Monitoring**

- Monitoring will be conducted in accordance with requirements of the REA and MNR Guidelines
- Monitoring will begin May 1, 2015
- Turbine searches will occur twice weekly from May 1st through October 31st, and raptor surveys will continue weekly from November 1st through November 30th.
- Correction factors are applied in order to calculate overall estimated mortality rates across the project
- Annual report provided to MNR by March 1 following each year of monitoring
- A minimum of 3 years of monitoring are required

# Monitoring and Mitigation Measures

- **Environmental Effects Monitoring Plan:**

- In accordance with the requirements of Ontario Regulation (O.Reg.) 359/09, the Environmental Effects Monitoring Plan addresses various elements including, but not limited to, heritage and archaeological resources, natural heritage features and noise.

- **Noise**

- The Provincial Environmental Protection Act (EPA) requires that noise emissions for any new projects must not have any adverse effects on the natural environment and not exceed 40dBA when wind speeds are of 6 metres/second and below.

NOTE: the allowable noise levels increase during higher wind speeds.

- The Acoustic Emission report was submitted on February 5<sup>th</sup>, 2015, to the Ministry of the Environment and Climate Change (MOECC). The facility is operating below the maximum noise emissions thresholds set by the MOECC.
- Noise emissions will not likely change unless there is damage to the equipment (immediately recognized by the computer monitoring system and addressed by the operations team).
- The Acoustic Immission audits commenced in Fall 2014, and will continue through Spring 2015. The Fall Acoustic Immission report will be submitted by July 2015, and the Spring Acoustic Immission report will be submitted by January 2016.

# Retirement and Decommissioning

## Lifespan

- The average lifespan of a turbine is 25 years.
- At the end of its lifecycle, a wind facility can either be decommissioned or repowered.

## Repowering:

- If the economics are viable, a facility may be repowered with new technology.
  - NextEra Energy has replaced hundreds of old turbines with 34 Siemens 2.3 MW machines at the Altamont Pass facility in California. Several kms of overhead electrical lines, electrical poles and redundant service roadways were also removed.

## Decommissioning:

- The process and impacts are similar to the construction phase, but in reverse sequence:
- **Temporary Work Areas:**
  - Creation of temporary work areas (50 m x 50 m area with topsoil removed).
  - Creation of crane pads (15 m x 35 m area with topsoil removed and crushed gravel added).
- **Removal of Equipment and Buildings:**
  - Use of cranes to remove the blades and hub and tower segments and use of trucks for the removal of turbines, towers and associated equipment.
  - Removal of above-ground lines and poles that are not shared with Hydro-One and filling of holes with clean fill.
  - Demolition of the substation.
  - Removal of roads and replacement with clean sub- and top-soil, unless the landowner requests that the roads be left in place.

# Retirement and Decommissioning

## Decommissioned Equipment Left in Place:

- Underground electrical lines will be cut and the ends buried 1 m below grade. These lines are inert and will have no negative impacts on the environment, soil and cultivation practices.
- Foundations will be left in place. The top 1 m will be removed and replaced with clean fill and stockpiled topsoil – to allow for cultivation of agricultural lands.

## Recycling:

- All materials will be recycled, where possible, or disposed offsite at an approved and appropriate facility.

# Ongoing Community Involvement and Access to Information

## NextEra Community Support:

- Local business and member of the community.
- Continued work with local businesses and vendors and use of local services/materials when possible.
- Community Vibrancy Funds established with Municipality of North Middlesex and Middlesex County
  - A Community Vibrancy Fund was established to support community initiatives and partnerships that may not be otherwise financially feasible through the local tax base. Bornish Wind, LP, will contribute a total of \$290,000 annually for the next 20 years to the Municipality of North Middlesex and Middlesex County.
- Local Charitable contributions

## NextEra Website:

- The project information on NextEra's website will be live indefinitely.
- Further communication may be posted on the website, or done via direct mail or through the media
- General Requests for Information:
  - Email: [bornish.wind@nexteraenergy.com](mailto:bornish.wind@nexteraenergy.com) Telephone: 1-877-463-4963



# Conclusion of the CLC Process

## Requirements Under the Renewable Energy Approval (REA):

- NextEra must make reasonable efforts to form a Community Liaison Committee (CLC) in order to facilitate two-way communications on issues or concerns related to the construction, installation, use, operation, maintenance and retirement of the Facility.
- The CLC is to operate for a minimum of two years from its formation and meet at a minimum twice a year.

## CLC Meetings Held To-Date:

- 4 CLC Meetings
  - **CLC # 1** – October 15, 2013
  - **CLC # 2** – May 20, 2014
  - **CLC # 3** – December 9, 2014
  - **CLC # 4** – April 8, 2015

**Site Tour** – May 20, 2014

## Requirement for Future CLC Meetings:

- As per the REA, at the end of the two-year period, NextEra and the MOECC will discuss whether or not the CLC should continue operating.

# Depositions from Members of the Public

- The CLC meetings are open to the general public for observation.
- Brief depositions (up to 3 per meeting, at a maximum of 5 minutes each) may be made by members of the general public, providing the depositions pertain to items on the meeting agenda (i.e., the construction, installation, use, operation, maintenance and retirement of the Facility).
- Depositions will be selected at the discretion of the CLC Facilitator and in consultation with the CLC members and NextEra.
- No depositions received

**Thank you!**



**NextEra Energy Canada and AECOM would like to sincerely thank all the CLC members for donating their time over the past two years and for their valuable input and interest in the project.**