# NextEra Energy Canada Goshen Wind Energy Centre

Community Liaison Committee (CLC): Meeting #4

March 10, 2016 6:00 p.m. to 8:00 p.m. South Huron Recreation Centre 94 Victoria Street East, Exeter

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.





### Introductions

### **CLC Members:**

- Cathy Seip
- Stephen Finkbeiner
- Allan P. Barnes
- Stephen Boles
- Gary Eagleson
- Chuck Ford
- James E. Dietrich
- Pat O'Rourke
- Bill Dowson
- Hubert Haccius
- Frank Palen
- Arnold Kester
- Aaron Neeb

Goshen Wind Energy Centre

#### NextEra Energy Canada:

- Amanda Gittens, Business Management
- Michael Blackmore, Wind Site Operations Manager
- Derek Dudek, Sr. Technical Services Manager
- Julie Rice, Business Management
- Heidi Lamarche, Construction

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

- Adam Wright
- Tiffany Lobb

#### Consultants

Christy Humphrey, NRSI



# Agenda

- 1. Introductions
- 2. Recap of CLC Meeting #3
  - Project Overview
    - Update on Post-Construction Activities
    - Operations and Maintenance Operations Team
    - Discussion of Monitoring and Mitigation Measures
  - Public Attendance and Depositions
  - Meeting Summary
- 3. Parking Lot Items and Questions / Comments Raised Since the Third CLC Meeting
- 4. Update on Construction and Remediation Efforts
- 5. Update from the Operations Team
- 6. Depositions none received
- 7. Public Question and Answer



## **Recap: CLC Meeting #3**

### Purpose of the CLC:

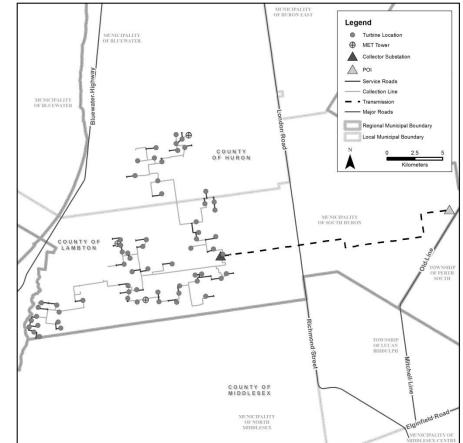
- A forum for two-way communication between NextEra Energy Canada and the public
- An opportunity to provide additional information and updates, and to respond to questions or concerns related to:
  - Construction and installation
  - Use and operation
  - Maintenance
  - Retirement of the Facility

### **Project Overview:**

- Class 4 Wind Facility, in the Municipalities of Bluewater and South Huron in Huron County
- 63 turbines, with 80 metre towers and 50.5 metre blades
- A generating capacity of 102 MWs
- Status of studies and approvals.
- Outline of construction process

### **Public Attendance and Depositions:**

• No local residents in attendance.





## **Recap: CLC Meeting #3**

#### Meeting Summary for our 3<sup>rd</sup> CLC Meeting:

- Draft minutes were prepared by AECOM and circulated to the CLC on **Dec. 10, 2015**
- Members were asked to advise AECOM of any errors, omissions or changes by Dec. 23, 2015
- All recommended comments/changes were incorporated and the minutes were posted on NextEra's publically accessible website the week of **Jan. 11, 2016**
- CLC members were also emailed the final minutes on Jan. 8, 2016



# **Recap: CLC Meeting #3 – Parking Lot Items**

Parking Lot Topic	Response / Action
NextEra to provide update on turbine red	To be discussed at CLC meeting #4
flashing light issue for next meeting.	
AECOM to include the IESO website link	Refer to pg. 9 of CLC #3 Meeting Summary
in the meeting minutes.	
NextEra to provide an update on vortex	To be discussed at CLC meeting #4
generators for CLC #4.	
NextEra to provide details regarding	Refer to pg. 16 of CLC #3 Meeting Summary
curtailment during the Tundra Swan	
migration period in the meeting minutes	
for CLC #3.	
CVF spending will be added to the	To be discussed at CLC meeting #4
agenda as a topic for CLC #4.	
Chair to provide CLC contact information	Action complete
to Gary Eagleson so he may lead the	
discussion regarding the CVF funds with	
the local council.	



### **Recap: CLC Meeting #3 – Local Labour**

### **Construction Stats**

- General Contractor is Borea Construction Canada
- At least 16 Huron County companies used (subcontractors and suppliers) on the Goshen project.
- There were nearly **\$4M** in contracts with subcontractors and suppliers within Huron County.
- Peak volume of individuals on site including subcontractors was around 250.
- Indirect economic benefits have not been measured, but local hotels, restaurants, home improvement stores, gas stations, machine shops, pubs and grocery stores have seen an increase in business since the start of the project.

#### **Projected Economic Impact**

Construction Jobs:	250 at peak
Full Time Jobs:	6
Capital Expenditures:	\$275 Million
Property Tax:	\$4 Million*
Landowner Payments:	\$29 Million*

### Performance

Performance is exceeding expectations – Equivalent Forced Outage Rate November to current is .64% Excellent safety performance – 0 lost-time injuries

\*Estimated over first 20 years of the project.



### **Update on Construction and Remediation Efforts**

# 1) Construction Clean up, Modifications and Road Repairs: largely complete

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

### 2) Reclamation: Summer to Fall 2015

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



### **Operations – Complaint Resolution:**

- NextEra acknowledges that some members of the community may have concerns regarding 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 operation and decommissioning phases, a NextEra representative will contact the complainant to understand the nature of the complaint.
- NextEra will notify the local MOECC (Ministry of Environment and Climate Change) 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).
- NextEra will provide the local MOECC district office with a written records of the complaint within 8 business days of the complaint. The MOECC 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:**

- Upon resolution of complaint, verbal and written correspondence will be provided to complainant as soon as possible.
- Information requests and complaints about the Goshen project specifically: NextEra Energy Canada, LP 390 Bay Street, Suite 1720 Toronto, ON M5H 2Y2

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

**Email:** goshen.wind@nexteraenergy.com

Website: www.NextEraEnergyCanada.com

• Any other general inquiries to NextEra Energy Canada, LP:

416-364-9714 - Main 877-257-7330 - Toll Free



# **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.
- Prior to construction, a Renewable Energy Approval (REA) was obtained with measures to be adhered to, i.e. noise modeling by independent consultants.
- 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).
- Acoustic Emission and Immission testing is partly completed. Results were reported to the MOECC by Jan. 2016.



# **Monitoring and Mitigation Measures**

### Bird and Bat Post-Construction Monitoring

- Monitoring will be conducted in accordance with requirements of the REA and MNRF Guidelines
- Monitoring began May 1, 2015
- Turbine searches occurred twice weekly from May 1st through October 31st, and raptor surveys are continuing 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 MNRF by the end of February following each year of monitoring
- 3 years of monitoring are required

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

- Species at Risk mortality monitoring began in April 2015
- Monitoring has been conducted in accordance with MNRF requirements
- All 63 turbines were searched monthly between April and November
- Annual report completed
- Species at Risk Monitoring continues for the life of the project



### **Monitoring and Mitigation Measures**

#### Natural Heritage Monitoring

- Post construction monitoring of certain wildlife habitats is required by the REA
- Amphibian Breeding, Red-headed Woodpecker, Bat Maternity Colony, and Heron Nesting Habitat Monitoring
- Habitat monitoring began in 2015, in accordance with the requirements of the REA
- 3 Years of habitat monitoring is required
- Annual reports will be submitted to MNRF by March 31 of each year of monitoring





# **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.

#### Decommissioning

• The process and impacts are similar to the construction phase, but in reverse sequence

#### **Decommissioned Equipment Left in Place**

- Underground electrical lines will be cut and the ends buried 1m 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 1m 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.



# **Public - Question and Answer Period**





### 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.

