NextEra Energy Canada Jericho Wind Energy Centre

Community Liaison Committee (CLC): Meeting #2

June 18th, 2015 6:00 p.m. to 8:00 p.m. The Legacy Recreation Centre 16 Allen Street, Thedford

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:

- Carol Clay
- John Couwenberg
- Dean Jacobs
- Mary Lynn Metras
- John Moons
- Marina Plain
- Marilyn Keunecke-Smith
- Jamie Tabor
- Eddy Van Engelen

CLC Coordinators and Facilitators (AECOM):

- Avril Fisken
- Adam Wright

NextEra Energy Canada:

- Julie Rice, Business Management
- Catherine Mitchell, Business Management
- Cassandra Bowers, Development
- Jeff Damen, Construction
- Doug McIntosh, Regional Operations Manager
- Kevin Bill, Operations Manager
- Peter Miller, Operations Manager

Consultants

- Charlotte Moore, Terrestrial & Wetland Biologist, Natural Resource Solutions, Inc.
- Scott Langstaff, Borea Construction



Agenda

1. Introductions

- 2. Recap of CLC Meeting # 1
 - Purpose of the CLC
 - Construction Overview and Update
 - Public Attendance and Depositions
 - Requests for Additional Information
 - Minutes (Parking Lot Items)
- 3. Activities and Questions/Comments Raised Since the First CLC Meeting
- 4. Update on Construction and Reclamation Efforts
- 5. Operations and Maintenance Introduction of Operations Team
- 6. Preliminary Discussion of Monitoring and Mitigation Measures (to be further discussed at CLC Meeting No. 3)
- 7. Depositions, if any requests received
- 8. Tentative Items for Discussion at Future CLC Meetings
- 9. Plus/Delta



Overview of the Jericho Wind Energy Centre

- The Class 4 Wind Facility is operating in the Municipality of Lambton Shores and the Township of Warwick, in Lambton County, Ontario and in the Municipality of North Middlesex, in Middlesex County.
- The ninety-two turbines, each with 80 metre towers and three blades up to 50.5 metres in length, have a generating capacity of 149-megawatts, capable of generating electricity to power nearly 37,500 homes.
- The project consists of wind turbines, overhead and underground electrical lines, two met towers, electrical substation, transformer substation (to connect to the Hydro One transmission system) and required roads.
- The Facility, with the exception of some electrical lines, was built on privately owned land, which remains in agricultural use.





Recap: CLC Meeting #1

Meeting Summary for our 1st CLC Meeting:

- Draft minutes were prepared by AECOM and circulated to the CLC on October 15, 2014
- Members were asked to advise AECOM of any errors, omissions or changes by October 29, 2014
- All recommended comments/changes were incorporated and the minutes were posted on NextEra's publically accessible website **October 31, 2014**
- CLC members were also emailed the final minutes on October 31, 2014

Opportunity for Improvement: We'd like to understand your expectation for when you should receive the summary of the meeting? Is two weeks after we meet acceptable?



Recap CLC Meeting #1 – Local Labour

Construction Stats

- General Contractor is Borea Construction Canada
- Many **Southwestern Ontario Companies** used (subcontractors and suppliers) on the Jericho project.
- There is at least **\$40M** in contracts with subcontractors and suppliers in the southwestern Ontario region.
- Peak volume of individuals on site including subcontractors is approximately 200.
- 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: Full Time Operations Jobs: Capital Expenditures Corporate Income Tax Property Taxes: Landowner Payments:

200 8 - 10 Over \$400 Million Over \$200 Million* About \$20 Million* About \$30 Million*

*Estimated over first 20 years of the project.



CANADA

Activities and Questions/Comments Raised Since CLC #1

None received



Status of Post-Construction Activities

1) Construction Clean up, Modifications and Road Repairs: January 2015 onward

- Waste and debris generated during construction activities to be collected and disposed of at an approved facility.
- All equipment and vehicles have been removed from the construction area.
- Reasonable efforts made to minimize waste generated and to recycle materials, including returning packaging material to suppliers for reuse/recycling.
- During construction: Use of industry best practices for spill prevention was utilized. In unlikely event of a minor spill, clean up will be immediate and any impacted soils will be removed from the site and disposed of at an approved facility.

2) Reclamation: (January to Summer 2015)

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



Update on Project Commissioning and Operations

Wind Turbine Commissioning: November 24, 2014 Requires Collection System, Substation, and Turbines to Start

- Turbine commissioning took place in sequential order prior to the planned Commercial Operation of the Project.
- Portable generators were used to provide backfeed power for commissioning prior to being connected to the power grid.
- Commissioning included testing and inspection of electrical, mechanical, and communications operability.
- A detailed set of operating instructions were followed in order to connect into the electrical grid.





Operations

• System Maintenance:

- GE 1.62 MW wind turbines are automated and have few maintenance requirements.
- Initial maintenance of the turbines occur approximately 500 hours after initial commissioning and routine preventative maintenance activities are scheduled as required.
- Maintenance activities include changing of oil and gas filters, cleaning of gear boxes, replacement of worn parts and on-going inspections.
- All maintenance activities adhere to the same waste disposal and spill prevention industry best practices undertaken during construction.
- Unplanned Turbine Maintenance:
 - Modern turbines are very reliable and designed to operate for approximately 25 years.
 - Minor component failure may occur (i.e. electronic cards, switches, fans or sensors) and can take a turbine out of service until the faulty component is replaced.
 - Replacement of a major component (i.e. gearbox or rotor) is atypical. NextEra would work with the County and the landowner to coordinate the delivery of any large equipment and repairs (if required).



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 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).
- 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:

- NextEra will provide the local MOECC 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, ULC 390 Bay Street, Suite 1720 Toronto, ON M5H 2Y2

Toll Free Phone: 1-877-463-4963

Main Office Line: 416-364-9714

Email: Jericho.wind@nexteraenergy.com

Website: www.NextEraEnergyCanada.com



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 will be conducted. Results will be reported to the MOECC.



Monitoring and Mitigation Measures

Species-At-Risk (SAR) Monitoring

- Species at Risk Monitoring continues for the life of the project
- 2015 Species at Risk monitoring will begin May 1
- Bird and Bat Post-Construction Monitoring
 - Monitoring will be conducted in accordance with requirements of the REA and MNRF 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 MNRF by March 31 following each year of monitoring
 - 3 years of monitoring are required



Monitoring and Mitigation Measures

- Natural Heritage Monitoring
 - Post construction monitoring of certain wildlife habitats is required by the REA
 - Bat maternity colony habitat
 - Habitat monitoring will begin in 2015, in accordance with the requirements of the REA
 - 3 Years of habitat monitoring is required
 - Annual reports will be submitted to MNR each year





Tentative Items for Discussion at Future CLC Meetings

CLC Meeting #3

- Post-Construction Activities (e.g., reclamation or required repairs)
- Update on Operations and Maintenance activities
- Monitoring and Mitigation Measures update
- Provisions for Decommissioning
- Other

CLC Meeting #4

- Update on Operations and Maintenance
- Monitoring and Mitigation Measures
- Other





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- Archaeological Reports
- Community Liaison Committee Materials
- Community Newsletter
- Construction Plan Report
- Consultation Reports, Information Packages and Other Communication
- Decommissioning Plan Report
- Design and Operations Report
- Heritage Assessment Report
- Noise Study Report
- Ontario Energy Board Documents
- Project Description Report

- Project Modifications
- Renewable Energy Approval documents
- Shadow Flicker Report
- Turbine Visualization Images
- Water Assessment & Water Body Report
- Wind Turbine Specification Report



Depositions from Members of the Public

- The CLC meetings are open to the general public for observation.
- Notices of upcoming meetings will be posted on NextEra's website (<u>www.NextEraEnergyCanada.com</u>). AECOM will also publish Notices in the local newspapers.
- 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.
- To be considered for a public deposition, a request along with the written deposition must be submitted to AECOM at least one week in advance of the CLC meeting:

Email: avril.fisken@aecom.com Fax: 519.763.1688 Mail: 55 Wyndham Street North, Suite 215, Guelph, ON, N1H 7T8

