

Community Liaison Committee

Meeting #3 Minutes

Meeting purpose	Cedar Point Wind Power Project Community Liaison Committee
Meeting date	October 14, 2015 6:30 - 8:30 p.m.
Report date	October 21, 2015
Location	Forest Legion
	58 Albert St, Forest, ON N0N 1J0
CLC Members	Tomas Burget, Cynthia Cook, John Couwenberg, Sandra deJong, Monica Douglas, Jocelyn Kelln (Suncor), Joanne Moore, Ed Vanderaa, Joe Zanyk
Suncor	Sohail Aslam - Major Projects Manager Chris Scott - Sr. Engineer Project Development Mark Kozak - Project manager Jason Vaillant - Communications and Stakeholder Relations
NextEra Energy Canada	Derek Dudek- Environmental Compliance Dennis Desloges- Operations Lead
Amec Foster Wheeler	Tony McInally- Health and Safety Ron Spear- Health and Safety
Stantec	Loren Knopper- Senior Risk Assessor
Facilitated by	Curt Hammond-Chief Listening Officer, Pearl Street Communications

Welcome, Agenda and Goals

- 1. Share actions taken from last CLC meeting
- 2. Share project and CLC update
- 3. Collect and respond to community questions

Safety Moment- Hunting Safety

Community Liaison Committee (CLC) Update

The Cedar Point Wind Power Project Community Liaison Committee (CLC) is a forum for the exchange of information between Suncor and representatives from the project community. The CLC will focus on issues and communications related to the construction, installation, use, operation, maintenance and retirement of the Cedar Point Wind Power Project in accordance with Suncor's safety, health and environmental values.

The CLC meetings and discussions will be proactive and focus on the 'how' of ensuring the community is informed, engaged and heard during construction through to operations of the project. The CLC will not be a forum for debates or conversations about the merits of wind energy. The committee will not re-visit those issues or concerns already addressed through the



Ontario Ministry of Environment's approval process or via the Environmental Review Tribunal Hearing.

Follow-up from Meeting #2

- 1. In response to recommendations made in the last meeting:
 - Printed materials of presentation were provided for people to follow along
 - A pointer was available
 - Microphones were used
 - Amec Foster Wheeler and NextEra Energy Canada were in attendance
 - Working to communicate more, a third meeting was held in 2015
- 2. Tree removal remediation update- provided later in the agenda
- 3. Post-remediation plan and update report- available at <u>www.suncor.com/cedarpointwind</u> under "Project Updates"
- 4. Suncor and Amec vehicles were more clearly marked with magnetic signs

Turbine Lighting

We have heard community concerns regarding the visual impact of the red navigation lights.

Turbine marking and lighting requirements are set out by Transportation Canada as a necessary measure to warn pilots of a potential collision during night time operations. The Cedar Point project is in compliance with Transportation Canada's mandatory standards for aviation safety.

We have installed the Orga L450-864G Red LED Beacon. To reduce the amount of lighting, we have installed them at intervals in the order of 900m. The lights also flash in unison to mitigate visual impact.

Suncor has investigated potential additional mitigation options including shades and aircraft activated radar. At this time, the decision has been made to not implement these products for a number of reasons including concern over Transport Canada certification, lack of testing and no reportable outcomes, and cost.

As new technologies become available, we will consider them for their applicability on the Cedar Point project.

Comment: Some individuals, including at least one CLC member find this response unacceptable and request that public concern regarding lighting remain on the agenda for future meetings. This was supported by several community members in attendance.

Q: Has Suncor ignored the concern of the First Nations regarding the impact of the lighting on navigation for fishermen?

A: There is ongoing dialogue between Suncor and the First Nations regarding this and other concerns. Any outcomes that result in changes to the project will be shared with the CLC.

Q: Why would these conversations be separate from CLC meetings or conversations with the general public?

A: First Nations have unique and constitutionally protected rights in Canada. Suncor will continue to consult with the First Nations for the life of the project.

Q: For several days the NextEra Energy Canada project in the area was down and the navigation lights weren't working. What notification systems are available to prevent this from being a safety hazard for pilots?

A: The project has controls to identify any failures as they occur. When the project was out of commission, the project team provided notification to Transport Canada who then issued a NOTAM (Notice to airmen) advising of the outage for any pilots navigating in the area.



Q: Are there backup power systems in the event of a failure so that the lights can stay on for safety?

A: Generally, if there is a failure that results in a lack of power to the lights, there would be no other way to provide power. This is why notification is provided immediately to Transport Canada.

Construction Update

Project Overview

Cedar Point is a 100 MW project consisting of 46 turbines in Lambton County and the townships of Plympton-Wyoming, Lambton Shores and Warwick.

At the time of the meeting, all turbines have been erected and an application to declare Commercial Operating Date (COD) was submitted on October 7, 2015 to the Independent Electricity Service Operator (IESO). Once the project has achieved COD, the terms of the contract with the IESO become active and the project will begin receiving payment for electricity generated under the terms of the contract.

Reclamation work is now underway at the construction yard and access roads. We are working to complete any necessary tile drainage, entrance and ditch repairs. This includes removal of gravel used in the construction yard and to widen access roads. Excess gravel is being distributed to various landowners in the project area at their request.

The project is now going through the final commissioning checks.

Q: Can you provide more detail on what is entailed in commissioning?

A: Commissioning refers to the stages of a capital project from construction completion to when equipment and systems are tested, operated for the first time and then operated under significant generation. In general, the commissioning plan also manages the key elements of the transition from construction to normal operations. The mission of commissioning is two-fold:

- To complete the successful capital development of a wind farm project by ensuring that integrated turbines and balance of plant systems are turned over in a satisfactory operating condition to the operations team
- To initiate the successful operation of the project

The commissioning is performed in several stages:

- Construction completion and cold commissioning, including quality assurance of installed equipment, collection system and substation as per engineered design, industry and government codes, standards and best practices
- Pre-operational testing, or wet commissioning. This involves the testing of key pieces of balance of plant equipment including switches, transformers, control systems, telecommunication network, etc.
- Commissioning, or utility interoperation commissioning. This involves testing the substation and collection system circuits, and turbines in a live, energized environment. Depending on the number of turbines and collector circuits, this process can take a few weeks to bring the entire wind farm online and to establish steady state operations
- Project completion. At this stage, the care custody and control of the wind farm operation is transferred from the construction team to the operations team

Apart from the testing and commissioning of the major components and systems, there is also great emphasis placed on Wind Farm Protection and Operational Controls. The protection system is integrated into Hydro One Network Inc. ("HONI") protection and control systems to meet the mandated requirements established by the Independent Electricity System Operator ("IESO"), Ontario Energy Board's (OEB) Transmission System Code (TSC), the Northeast Power Coordinating Council (NPCC), and the North American Electric Reliability Corporation (NERC) requirements.



The protection systems are designed to meet the following criteria:

- Prevent or minimize the chance of injury to personnel,
- Prevent or minimize equipment damage,
- Minimize the frequency & duration of a power system outage, and
- Minimize the effect of a disturbance on the power system network.

Q: When will construction be completed?

A: All commissioning activities, site reclamation and temporary road repairs will be completed in November, weather permitting. Final road repairs will be completed in the Spring of 2016, after the half load road restrictions are lifted.

Health and Safety Update

Since the last CLC meeting, concerns that have been shared with Suncor include proximity of turbines to roadways, road conditions in the project area, and turbine lighting.

Actions taken

- Individuals were taken on site tours with the construction manager to provide perspective on the setbacks. Recommended setbacks from roadways are blade length + 10 m, which in the case of the Cedar Point project is about 66 m.
- Additional signage, included lowered recommended speed limits, was posted in the most significantly affected areas. Road repairs are underway, with final repairs anticipated in the spring of 2016.

Incidents onsite

Health and safety incidents on site over the summer have prompted a number of internal changes with both Suncor and our contractors. Some of the actions that have been taken include:

- Each contractor completed a risk assessment identifying any potential safety hazards/risks associated with their work, particularly as the project heads into different phases (commissioning)
- Peer to peer safety tours- the Environment, Health and Safety representatives have been taking individuals from various contractors out on safety tours so that they have a chance to see the worksite through the eyes of their peers. They can provide a fresh set of eyes to identify any potential risks that other's may miss.
- Contractor leadership teams have also gone out on safety tours to get them out of the office and into the field to see the work that is going on
- Near miss tracker and trend monitoring is now a standing item at the morning plan of the day meetings
 - This has increased the frequency of near miss reporting and raised the safety profile

Emergency Response

Q: Are the fire suppression systems installed and operational?

A: Both Plympton-Wyoming and Warwick have passed bylaws requiring the installation of fire detection and suppression systems in new wind projects. Suncor and NextEra Energy Canada have been meeting with the fire chiefs in both municipalities. They are currently reviewing our proposal for fire suppression equipment installation. The goal is to have all systems installed by the end of November. The Fire chiefs were pleased to be informed that all machines are already equipped with fire detection systems that will shut down the turbines in the event a fire event is detected.

Q: Why are you able to operate without the fire suppression systems installed?



A: Both of the by-laws allow time for consultation and installation.

Plympton-Wyoming

- 19 turbines
- Need to have fire suppression selected, approved by fire chief and installed within 120 days of July 29

Warwick

- 1 turbine
- Need to have fire suppression plan submitted for approval within 60 days of bylaw
- Within 120 days of approval by the Fire Chief, fire suppression needs to be installed
- Notification of the bylaw was provided on Aug 27. And the timelines were started based on this notification instead of the date the bylaw was passed.

Q: What happens if the timelines aren't met?

A: The bylaws outline penalties for exceeding the timelines. We intend to meet the timelines and are currently in discussions with the fire chiefs/municipalities.

Q: Have emergency response plans been provided to the emergency responders in each township? Can they be made public?

A: Yes they have been shared with local emergency responders. The plans contain contact information and other details that cannot be shared publically. However, if there are certain parts of the plans that you are concerned with, please contact us for more details.

Q: What happens if there is a fire? Will it be left to burn? There are toxins that are released. Turbines should not be operated without fire suppression in place.

A: We are currently discussing these concerns with the fire chiefs. There is an emergency response plan in place that deals with emergency situations and outlines responsibility for those involved. Each turbine has a fire detection system that will automatically shut down the machine (disconnect power) in the event of a fire.

Q: Will the access roads be maintained in the winter for emergency access?

A: Yes, roads will be maintained throughout the winter. We are currently working on getting snow removal agreements in place with local contractors.

Q: What is the new tower off of Hubbard Line?

A: This is a meteorological tower that is required as part of the project. There are two towers used for IESO reporting and one additional temporary tower will be installed for power performance testing.

Woodlot Incursion Update

The reclamation plan provided by Stantec was approved by the Conservation authority in June and immediate reclamation activities were carried out in July of this year. Those activities were reviewed by Stantec and a progress report was provided. The full reclamation plan and progress report can be viewed at www.suncor.com/cedarpointwind under Project Updates.

A replanting plan is currently being developed and will be reviewed by the Conservation authority. Replanting is expected to begin by the end of October.

Q: Is the Ministry of Environment and Climate Change (MOECC) investigation still ongoing? A: Yes and that process can take up to 2 years. As more information becomes available we will provide updates.

Q: Have the landowners who had trees removed from their property been compensated? A: Yes, four of the five have been compensated through existing land lease agreements. The fifth agreement is currently being negotiated.

Q: What are the sizes of the trees being replanted? Why has this not already been finalized? A: As the plan is developed, tree sizes and species will be determined. There is still adequate time in the season to complete replanting activities and we are working to source local suppliers.



Reclamation and Road Repairs

At the time of the meeting, site reclamation has been completed at the majority of the turbine locations with tile drainage repair underway. Suncor is committed to restoring all property to preconstruction status, so any damaged fences, ditches, tile drainage, roadways or other property infrastructure will be repaired under the terms of our lease agreements.

We are working closely with the townships to restore and repair public roadways damaged during construction. As it is late in the season, more permanent road repairs will not be possible until after the half load restrictions are lifted in the spring, so temporary road restoration measures will be taken in the fall and final repairs are planned for May 2016.

A summary of those repairs and plans follows.

Lambton Shores Road Repairs

Road repairs will involve saw cutting damaged road surfaces, removing and disposing existing loose material, and supply, place and finish 75 mm HL3 hot mix asphalt.

We have reached an agreement with Lambton Shores whereby the town will use its preferred paving contractor to perform road repairs at the following locations at our cost:

- 8 locations on Fuller Rd, South of Proof Line
- 1 location on Proof Line, West of Fuller Road

Plympton-Wyoming Road Repairs

On October 14, 2015 Plympton-Wyoming council accepted our proposal for temporary road restoration on Douglas Line and Hubbard Line for the 2015/2016 winter season.

Gravel Roads

Plympton-Wyoming roads are mainly constructed out of gravel. The subgrade and road base for these roads is generally unknown; however the roads appear to be sustaining the increased usage from the CPII Project well. For graveled roads there may be the need to repair sections where construction traffic has resulted in subgrade failure. These areas will be identified and agreed to with between the project and the Plympton-Wyoming Road Superintendent. Areas that need subgrade repair will be addressed by excavating area to a suitable sub-base, adding geo textile + suitable subgrade material (e.g. Granular B Type 2), and dressing with granular M or material that is equivalent to existing road conditions.

Roads with Surface Treatment (Tar & Chip)

Douglas Line and Hubbard Line have thin layers of surface treatment (Tar & Chip) applied. These roads have not been performing well with the wear associated with heavy construction loads. We have been maintaining the roads by replacing areas of broken up surface treatment with packed fine granular material or limestone screenings and smoothing potholes on a weekly basis. The intent of this repair has been to maintain an adequate road surface during construction.

Permanent repair will not be possible this fall as surface treatment requires ambient temperatures of greater than 10°C and we are anticipating the end of construction in November. To ensure road safety throughout the 2015/2016 winter season and to provide a consistent surface for winter maintenance of the areas impacted by construction activities, we will be converting segments of Douglas and Hubbard to gravel surfaces by pulverizing existing tar and chip and topping with granular material, shaping and compacting as needed.

The road surface will be graded and tapered onto existing shoulders and driveways. Permanent signage will be placed to identify the transition from hard surface to gravel road at each end of the repaired areas. The following sections will be converted to gravel as part of the temporary repairs:

- Douglas Line between Uttoxeter Road and Hillsboro Road (2.9km)
- Hubbard Line between Uttoxeter Road and Lakeshore Road (2.7km)



As a good will gesture, we have also committed to convert a 0.7km section of Douglas Line, west of Forest Road (which was not impacted by CPII construction) to gravel; however the responsibility for surface treatment restoration of this section of road surface will be left to the township.

Surface Treatment – Long Term/Permanent Repair – 2016 Scope

The project has retained Amec Foster Wheeler (Amec-FW) to complete a detailed road assessment and establish the remediation scope for the project roads once the project is complete. We will then work through the RUA terms to come to agreement on repair and restoration scope for the 2016 paving season.

Q: Will speed limits be reduced when repairs are ongoing or notifications provided? A: We will make recommendations to the municipalities regarding reduced speed limits; however, road signage is controlled by the municipalities under the Highways Traffic Act.

Comment: Comments from CLC member and community members that the impacts to Hubbard Line, in particular, have been extensive, inconvenient and dangerous to those unfamiliar with the roadways.

Q: Where did the gravel go that was removed from the access road entrances?A: This has been given away to landowners that have requested the materials (40+ landowners).

Q: How wide are the access roads?

A: Final roads are approximately 6m wide. This is sufficient for any ongoing maintenance activities. Major repair activities could result in the need to new temporary leases on an asneeded basis.

Operations

Sound Testing

Once the project has reached commercial operation date (COD), sound testing will begin at selected sites. The project has retained a third party to complete the sound testing in compliance with all requirements as outlined in the Cedar Point Renewable Energy Approval. (Aercoustics Engineering Limited)

Testing locations (receptors) will be selected based on sound modelling. Based on conditions such as proximity to other infrastructure, predominant wind direction, and other sources of sound, the locations with the most probability for the highest sound levels will be selected.

As part of the testing, we measure two different types of sound:

- 1) Emission- the sound produced by the turbines and substation; and
- 2) Immission- the sound heard by an observer.

Measurements are taken during various wind conditions and at different times of day. Testing takes into consideration factors such as proximity to other sources of sound such as highways and other turbines.

Limits on noise are defined by the Environmental Protection Act (EPA) as 40 decibels (dBA) in wind conditions of up to 16 metres/second (21.6 kph). Allowable noise limits increase during higher wind speeds.

Q: Are all turbines tested?

A: No, there is a protocol that defines which turbines are tested as part of the acoustic audit.

Note: If you would like to request that testing be completed at your residence, please submit a request in writing through <u>cedarpoint@suncor.com</u> or by telephone at 1-866-344-0178. Your request will be shared with the third party completing the testing; however, please note that there are regulations that outline specific requirements for site selection and they may not be able to accommodate your request.



Q: Can a personal testing device be requested (in addition to the REA testing)? A: Requests can be made to the MOECC for testing to be completed at individual receptors. This would be at the discretion of the ministry.

Q: Will the results of the Cedar Point sound audit be made public?A: Yes, a plain language summary will be provided along with the analysis results.

Q: Can raw noise data and SCADA data be shared with the public for an independent review? A: SCADA data is considered proprietary information and will not be released to the public. The summary data contained within the sound audit and analysis will be shared once the testing has been completed by our independent third party acoustician.

Q: Can sound levels increase as the wind speed increases?

A: Yes, the allowable sound level increases as the wind speed increases. The highest sound level permitted at a receptor is 51dBA at 10m/s wind speeds. These details are provided in the REA which is available on the Project website.

Q: Are higher sound levels typical during project commissioning? A: It is a possibility. The goal is to ensure they operate at peak performance.

This figure demonstrates the sound limits for Wind Turbines in Ontario. Cedar Point is in a Class 3 area (the pink line) which is defined as Urban.

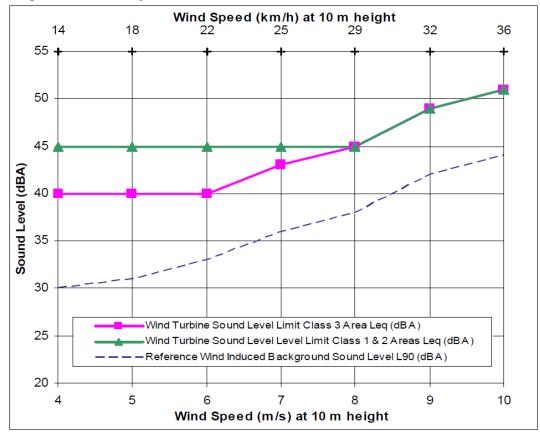


Figure 1 Summary of Sound Level Limits for Wind Turbines

Visit the MOECC website to download the complete document Noise Guidelines for Wind Farms



Bird and Bat Monitoring

- Monitoring will begin in May 2016 and will be conducted in accordance with requirements of the REA and MNRF Guidelines
- Turbine searches will occur twice weekly
- Correction factors related to searcher efficiency and scavenger rates are applied in order to calculate overall estimated mortality rates across the project
- Annual report provided to the Ministry of Natural Resources and Forestry
- 3 years of monitoring are required

Q: Is there a pre-turbine evaluation to understand the pre-construction wildlife considerations? A: Yes- as part of the application and permitting process, we conducted a Natural Heritage Assessment that identified any potential impacts to the natural environment. You can review that assessment on the project website <u>here</u>.

Q: When is the monitoring done?

A: Monitoring will be conducted for three years, beginning in 2016 between May 1 and Oct 30.

Q: The present REA & MNRF guidelines do no accurately capture the bulk of the migratory period (including Tundra swans) which really begins in early March. Can the monitoring period be extended?

A: This can be discussed with the Ministry of Natural Resources and Forestry.

Comment: Some feel that the 50 meter carcass search radius is inadequate, especially considering the potential throw of the blades.

Q: If problems are identified, what is done?

A: Various mitigation measures would be implemented such as curtailment and additional monitoring. All of the requirements are detailed in the REA.

The thresholds defined in the project REA are as follows:

- 10 bats per turbine per year
- 14 birds per turbine per year at individual turbines or turbine groups
- 0.2 raptors per turbine per year (all raptors) across the Facility
- 0.1 raptors per turbine per year (provincially tracked raptors) across the Facility
- 10 or more birds at any one turbine during a single monitoring survey
- 33 or more birds (including raptors) at multiple turbines during a single monitoring survey

If thresholds are exceeded, the REA also defines mitigation activities in alignment with the Natural Heritage Assessment. Some of the potential required mitigation activities include, but are not limited to: periodic shut down of select turbines; or blade feathering at certain times of year; or an alternate plan agreed to between the Company, the Director and the Ministry of Natural Resources and Forestry.

Q: Have any other projects sites exceeded their limits?

A: It does happen and other NextEra Energy Canada projects have had to implement mitigation efforts, including periodic curtailment of certain turbines.

Comment: A community member noted that a nearby raptor rehabilitation facility has noticed an increase in the number of birds at the facility which they believe to be the result of the increase in the number of wind turbines in the area.

Q: How tall are the turbines?

A: At the top of the tower-100m; including the blade at vertical-157m. All turbine heights within the project are the same.



Complaints



Complaints can also be directed to the Ministry of Environment and Climate Change

Monday-Friday from 8:30-4:30 at the Sarnia office: 519-336-4030

After hours, call the Spills Action Hotline at 1-800-268-6060

What happens when we receive complaints?

- The toll free line goes directly to the Suncor Operations Lead- Jason Weir. If he is unavailable, you will be directed to leave a message.
- You will be contacted by a project representative within 24 hours
 - Please be sure to indicate the best way for us to contact you
- Once messages are received, an investigation is launched immediately

If you see an emergency, please call emergency services directly. An emergency is something that presents an immediate threat to public health and safety. We are connected with local emergency services and will work together to respond.

Suncor is required to notify the local MOECC (Ministry of Environment and Climate Change) district office of all complaints within 2 business days of receipt.

The MOECC notification will include:

- Description of the nature of the complaint;
- Wind speed and direction at the time of the incident related to the complaint;
- Time and date of the incident related to the complaint;
- Duration of each incident;
- the ID of the equipment involved and its output at the time of each incident; and
- A description of the measures taken to address the cause of the incident and to prevent a similar occurrence in the future

Comment: A community member noted that each turbine should be treated as a plant on its own. They noted that there are excellent systems are in place at Suncor's refinery and a similar system should be in place for the wind project.



Response: We take health and safety very seriously, and we believe that appropriate emergency response systems are in place.

Comment: Community response complaint process is inadequate (24 hour response). A suggested protocol was provided by a member of the community.

Comment: Health concerns related to autism in children and the lack of clinical studies presented to the ERT. One local resident had their concerns addressed through legal proceedings, but there is the belief that there are several other families in the area that are not being addressed.

Q: Has Suncor tried to determine if any other autistic children are within the project area or the Jericho area? If so, will the same agreement that was reached with one resident be provided to those families by Cedar Point? Will NextEra give the same consideration and agreement to those within the Jericho project?

A: Suncor and NextEra Energy Canada invite any families with concerns about the potential impact of the Cedar Point project or any other Suncor projects to reach out through the various communication channels available. While the terms of any previous agreements are confidential, we understand that each family is different and has a unique set of concerns that cannot be addressed with a one-size-fits-all solution. Any agreement would be worked on a case-by-case basis with the individuals involved.

Comment: A member of the community expressed frustration with this and other projects, distrust of large developers and government generally.

Key Concerns

- Nav lighting (red beacons)
- Emergency Response and complaint process
- Bird monitoring
- Acoustic measurement and sound

Key Decisions

• Invite a representative from the company that will be completing the sound testing for the Cedar Point project to provide a technical briefing on the equipment, the process and the regulations at the next public meeting.

Action Items

Action	Responsibility
Draft meeting minutes and presentations posted on website	Suncor
Review and approve meeting minutes	CLC
Provide updates on Fire suppression systems on project website	Suncor
Post the final replanting plan for the woodlot remediation on the project website	Suncor
Provide a plain language summary of the sound audit report and analysis	Suncor
Investigate the possibility of extending the bird monitoring period to account for Tundra Swan migration	Suncor

Next meeting

TBD- First Quarter 2016- Jan-Mar