



MEETING MINUTES

Subject: Community Liaison Committee Meeting #4
Date and Time: February 7, 2017 6:00pm – 9:15pm
Location: Wellandport Community Centre
 5042 Canborough Road, West Lincoln, ON
Our File: 15-2673

Attendees

Adam Rosso, Boralex
 Heather Plewes, Boralex
 Jason Weir, Boralex
 Stephanie Bujold, Boralex
 Michael Gaudet, Boralex (in audience)
 Charlotte Teat, Natural Resource Solutions Inc.
 Payam Ashtiani, Aercoustics
 Melissa Tomascik, Niagara Region
 Jordan Fois, Community Member
 Karla Kolli, Dillon Consulting (Facilitator)
 Nadia Galati, Dillon Consulting

Regrets:
 Drew Cherry, GRCA
 Sue Flaherty, Haldimand County
 Brian Staff, Community Member
 Gerry Veldhuizen, Community Member
 John Sikkens, Community Member
 Jason High, Community Member

Notes

Discussion Items

1.0 Introductions & Meeting Structure

- CLC members introduced themselves.
- Facilitator provided an overview of the purpose of the CLC and explained the meeting framework.

2.0 Review of Past Minutes – CLC Meeting #3

- Last meeting was October 25, 2016 at the Wellandport Community Centre.
- There were a number of action items – action items are all either completed and documented in the minutes or on the agenda for discussion at this meeting.

3.0 Project Update

3.1 Current status – Wind farm is operational

- NRWF achieved its Commercial Operation Date (COD) on November 2, 2016.
- The project is fully operational.

Discussion Items

3.2.1 Intro of Operations team:

- Jason Weir, Site Manager
- Michael Gaudet, Wind Site Technician
- Stephanie Bujold, Environmental Manager

3.2.2 Current activities on site:

- Working with Enercon on the day-to-day turbine work such as maintenance.
- Working on regulatory commitments that the project has to meet or complete (i.e., bird and bat monitoring, acoustics monitoring, etc.)
- Ongoing liaison with government officials at the Ministry of Environment and Climate Change (MOECC), Ministry of Natural Resources and Forestry (MNRF), and local municipalities.

3.2.3 Contacting NRWF

- People with concerns about the project were encouraged to contact NRWF directly. The following are the ways to contact NRWF directly:
 - **Phone:** 1-844-363-6491
 - **Email:** info@nrwf.ca
 - **Website:** www.nrwf.ca
- In the next 4-6 weeks the website address will change but anyone using the current website address will automatically be redirected to the new website.

4.0 Guest Presenters

- Natural Resource Solutions Inc. (NRSI): Charlotte Teat, Terrestrial & Wetland Biologist
- Aeroustics: Payam Ashtiani, Principal Acoustical Engineer

4.1 Natural Resource Solutions Inc. (NRSI)

- Natural Resource Solutions Inc. (NRSI) is an environmental consulting firm consisting of biologists specializing in aquatic, terrestrial, and wetland biology.
- NRSI has extensive environmental monitoring experience on wind power projects in all stages of development.

4.1.1 NRSI will be completing the following five post-construction surveys:

- Avian and bat mortality monitoring;
- Significant woodland and wetland hydrological monitoring;
- Amphibian woodland and wetland breeding habitat surveys;
- Migratory landbird stopover and staging area surveys; and
- Raptor wintering area surveys, including short-eared owl surveys.

4.1.2 Bird and bat mortality monitoring surveys:

- Monitoring work is conducted in accordance with requirements of the REA and MNRF

Discussion Items

Guidelines

- Based on bird and bat survey requirements of the REA and MNRF two turbines have been selected for NRSI monitoring for bird and bat mortalities under the turbines.
- Raptor mortality monitoring began January 5th, 2017 at 2 turbines (T01 and T58).
- These turbines are being monitored throughout the winter season as they have been identified as in potential habitat for wintering raptors.
- A subset of 23 turbines will be selected for twice-weekly bird and bat mortality surveys, from mid-April through October 31st and once per week from November 1st through November 30th
- The remaining 54 out of 77 turbines will be searched once per month from May 1st through October 31st. The other 23 turbines will be searched twice weekly as indicated above. Staff will specifically be looking for raptor mortalities as they typically habitat the space the longest. Staff will walk under the turbines and collect and record any mortalities.
- Three (3) years of monitoring is required.
- If any REA or MNRF Guideline threshold is exceeded, the approved mitigation measures will be implemented as required.

4.1.2.1 Correction factors

- Correction factors are applied in order to calculate overall estimated mortality rates across the project based on:
 - Scavenger removals – carcasses that are removed by other animals.
 - Searcher efficiency – searchers might not locate all mortalities due to human efficiency.
 - Unsearchable amount of land – Of the required project area searched, not all of it may be physically searchable. The unsearchable area will be evaluated (m²) and the parameter will be included in the corrected mortality counts, as per MNRF guidelines.

4.1.3 Supplementary Surveys (Environment Canada):

- Supplementary monitoring will be conducted at 10 of the subset of 23 turbines to include a larger radius of search – 85m from the turbine base, instead of the typical 50m radius because of the size of the turbines.
- Twice-weekly monitoring to take place from mid-April through October 31st.
- A separate annual report will be prepared for these turbines.

4.1.4 Post-construction behaviour monitoring:

- Pre-construction surveys completed by Stantec were conducted to search for significant habitat areas and use
- Based on significance, post-construction surveys are required to assess any potential changes in habitat use
- Amphibian woodland and wetland breeding habitat surveys (1 year)
- Migratory landbird stopover and staging area surveys (3 years) – stop over and wintering

Discussion Items

- surveys
- Raptor wintering area surveys, including short-eared owl surveys (3 years)
- Significant woodland and wetland hydrological monitoring (1 year):
- Inspections of culverts one year after COD within 30m of access roads to ensure hydrological flows are maintained throughout the project area.

DISCUSSION QUESTIONS:

QUESTION: What is mitigation?

- To "mitigate" means to make less harsh or hostile. Mitigation measures are approved plans to offset known impacts to an existing historic or natural resource such as a stream, wetland, endangered species, archaeological site or historic structure.
- For bat mortalities the threshold above which mitigation is applied is 10 bats/turbine/year – if this threshold is exceeded turbine operation is modified during bat activity periods. Under modified conditions turbines would not start turning until wind speed is 5.5 m/second or greater providing more protection for the bats which are active at lower wind speeds.

ACTION: Post construction mitigation thresholds for all species monitored are listed in the REA document and are available on the project website:
http://www.boralex.com/cms/uploads/library/files/RENEWABLE-ENERGY-APPROVAL-NO_-4353-9HMP2R1.pdf

QUESTION: Who pays for the NRSI?

- Boralex pays NRSI to complete the studies. The studies are a requirement of the Renewable Energy Approval (REA) and must be submitted to the MNRF.

QUESTION: Where do carcasses come from?

- To help calculate the number of mortalities that are removed by scavengers, the NRSI team place animal carcasses in the study area to calculate the scavenging rates.
- NRSI receives some bird carcasses through a Royal Ontario Museum program which includes birds that fly into Toronto buildings and perish.

QUESTION: Is monitoring being done for Blanding's Turtle?

- Pre-construction assessment studies completed as part of the Renewable Energy Application identified species that had significant habitat in the turbine areas. Monitoring is only being completed for these species. After reviewing the literature, there are habitats of Blanding's Turtle within the Project Area and Boralex has operational mitigation actions as per the project's REA.

QUESTION: How are the wetlands being studied determined?

- Any wetlands within 120m from project components are studied.

Discussion Items

QUESTION: Is this project approved through the LRP I or LRP II?

- LRP is a procurement program that IESO put on hold by the government for future projects.
- This project was approved under the FIT program; it predates LRP.

QUESTION: Where is the project funding coming from? Will the project grow?

- The project is financed through lenders (6 international banks).
- There will be no new leases – no additional lands to be secured.
- As the owner, Boralex receives payment for the energy produced from the province of Ontario. The rate per kilowatt hour being paid was established during the FIT program process.

QUESTION: Were deer identified in pre-construction surveys?

- Pre-construction did not identify any deer wintering areas in the project study area. Thus no surveys/monitoring of deer wintering areas are being conducted.

QUESTION: How do you determine what is ‘significant?’

- Whether or not habitat is considered significant is based on MNRF criteria and guidelines.

ACTION: Project to identify link to the Ministry of Natural Resources and Forestry’s ‘Significant Wildlife Habitat’ list to be included in the meeting notes:

<https://www.ontario.ca/document/guide-significant-wildlife-habitat>

QUESTION: How many animals are you monitoring?

- Mainly birds and bats and any protected species. Every animal that is observed during a given survey is recorded and the data compared to pre-construction baseline information.

QUESTION: Are threatened or endangered species habitat’s significant?

- Significant wildlife habitat are less at-risk habitats and thus do not include threatened or endangered species.
- There is an operational mitigation plan in place for NRWF specifically destined to protect bat species that are listed as endangered. If significant impacts to threatened or endangered species are anticipated additional studies are conducted in accordance to MNRF guidelines.

QUESTION: When looking for dead birds and bats, shouldn’t you be looking farther than 85m out from the turbines?

- MNRF guidelines require mortality surveys within a 50m radius of the turbine.

Discussion Items

- The Project is conducting assessments to an additional 35m radius area for a total of 85m for some of the turbines.

QUESTION: Have you carried out an Environmental Impact Study (EIS)? Who provided Terms of Reference (ToR)?

- An EIS was conducted as a part the work completed for the Renewable Energy Application. Information on this work can be found in the reports on the project web site: <http://www.boralex.com/projects/niagararegionwindfarm>
- The Terms of Reference for this work was set out by the MNRF and approved by the MOECC.

4.2 Aercoustics

- Aerocoustics are experts in wind turbine acoustic measurement and monitoring.
- They have completed acoustic assessment and sound modelling for over 1 GW of wind energy; logged more than 100,000 hours of post construction noise measurements from wind turbine facilities.
- Accredited to measure wind turbine noise emissions as per CAN/CSA Standard C61400-11:07 standard.
- Noise monitoring performed on behalf of Industry, Regulators and Residents.
- Unbiased data and information.

4.2.1 REA identifies the need for the following 3 types of post construction noise monitoring:

1) Wind Turbine – Receptor Audit (Acoustic Audit Immission)

- Immission audits - measures noise at people's homes.
- Acoustic audit completed at five (5) receptor locations.
- Two separate audit periods (preference for audit timing to be conducted one in spring, and one fall due to lower baseline noise that can interfere with audit results).
- Results are compared to REA conditions, specifically to condition C1 (1).
- Five (5) locations to be monitored as required by the REA.
- MOECC guidelines indicate how to pick the receptor locations.
- Receptor locations are chosen based on worst case impact and prevailing downwind conditions.
- Measurement procedure and analysis based on MOECC guideline – 'Compliance Protocol for Wind Turbine Noise' – this guideline outlines how to analyze the data.
- Measurements taken during night-time (10pm to 5am) to focus on times when background noise is at the lowest level.
- Monitoring process takes approximately 4 weeks to account for weather conditions (data collected when wind is too gusty or it's raining cannot be used as it can give false readings). Testing duration is ultimately dependent on appropriate weather conditions materializing, and could take longer depending on site conditions.
- Results will be compared to Sound Level Limits set by MOECC guideline – 'Noise Guidelines

Discussion Items

For Wind Farms – Interpretation For Applying MOE NPC Publications To Wind'

2) Wind Turbine – Noise Emission/turbine test (Acoustic Audit Emission)

- Emission testing/source test – measures noise at transformer substation and individual turbines.
- REA permit requires one test per turbine type (Two (2) turbine types to be tested for this project. Results are compared to the manufacturers' specifications to make sure that noise levels claimed are actually being met.
- The 3.0 MW turbine (e.g. T03) is rated to have a noise emission at source of 104.8 dBA
- The 2.9 MW turbine (e.g. T46) is rated to have a noise emission at source of 102.9 dBA
- Acoustic emission measurements performed in accordance with the CAN/CSA-C61400-11:07 National Standard
- Results are compared to manufacturers' product specifications to ensure turbine is functioning as required.

3) Transformer Substation

- Acoustic Audit of two (2) Transformers Sound Emissions
- Two (2) types of surveys will be done related to the substation: noise emission from the transformer and receptor measurements taken at landowners' homes closest to the substation.
- Testing in accordance with the IEEE Standard C57.12.90 and NPC-233
- Transformer sound power levels reported and compared to maximum sound power levels as specified in Schedule B of the project's REA.
- Assess tonal audibility (hum) of transformer assessed; as technology changes hum is reduced but all noise is audited.
- Nearby Receptor measurements:
- Near field and receptor based measurements, compliance assessed at the receptor with regards to sound pressure level and tonal audibility – again testing what was said in the manufacturers' model specifications against what is actually happening.

4.2.2 Aercoustics Schedule – based on REA required timelines for noise audits:

- Wind Turbine – Receptor Audit will be completed in Spring 2017 and Fall 2017
- Wind Turbine – Emission Audit will be completed in Spring 2017
- Transformer Audit will be completed in Spring 2017

DISCUSSION QUESTIONS:

QUESTION: Why does the noise from turbines differ? The specifications presented about these turbines are different than other projects with the same type of turbine? Why are they different?

- There are different generators in different generations/models of turbines and a change in component parts could cause different noise levels.

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- We assess the emission audit against the manufacturer's specifications to ensure it is operating as intended and approved/permitted.

QUESTION: Do noisy elements (i.e. heavy rain, tractors passing by an audit/turbine test) contaminate the data?

- Noisy elements can contaminate data that is why team has an individual on site while the data is being gathered for the emission measurements, and unattended receptor measurements near houses only use the night-time levels to minimize the amount of contamination. When noisy elements occur, that sound can be removed from the data.
- During the emission measurements, if there are elements in the environment that are just as loud as the turbine, the data cannot be used and the test has to be retaken.
- For the immission measurements, the team monitors weather forecast to pick best conditions to conduct the tests. Receptor testing data collected only at night time when there is less chance of contaminating the data.
- In the frequency analysis you can see a significant difference in the data when there is something active, like a tractor passing by the turbine. That data can be discarded from the assessment to ensure the on/off data are correct.

QUESTION: Why don't you show a graph on what the manufacturers' turbine specifications are compared to the noise audit results?

- The noise audits have not yet been completed. Once the audits are done the graphs that you are asking for will be developed.

QUESTION: Do you use data gathered during the fog? Who owns the data at the end? Can the data be publicly available? The data is not impartial.

- Yes, audits can be done during fog. However, data cannot be completed if it is raining.
- Those conducting the audits, analysis and reporting are licensed engineers who stamp an acoustics report and are professionally responsible for their findings.
- Measurements and reporting are submitted to Boralex for submission to the MOECC.
- MOECC reviews the noise engineers' work to confirm compliance.

ACTION: Boralex to consider publicly releasing the noise data in the future

QUESTION: Are the 5 homes selected for receptor testing leaseholder homes?

- The 5 homes selected are non-leasehold homes.
- The selected homeowners will be approached over the next few weeks and asked if testing can be done at their property.

QUESTION: Why are the noise levels inside homes not being monitored?

- The Ministry requirements stipulate monitoring of outdoor noise.
- Noise levels of 40 dBA or less outside the home is in compliance with the Ministry noise

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standards.

ACTION: Boralex will evaluate whether or not to do indoor noise testing on a case-by-case basis.

QUESTION: Was shadow co-efficient testing done on this type of system as well as shadow flickering?

- Boralex is starting to do shadow flickering analysis on a case-by-case basis after assessments are completed.

QUESTION: Why is ENERCON always around? Can they attend a CLC meeting to answer questions?

- ENERCON is not a project owner. They are contracted to do the turbine maintenance over the next 15 years.
- Boralex owns and operates the wind farm. The operations staffs, at the CLC meeting, are the most appropriate and technically qualified to respond to questions.

QUESTION: When doing turbine noise emission, are the measuring tools moved based on turbine location/the yaw of the turbine as it is turning?

- A technician on site is present to ensure the location of the measurement tools is correct and adjusts as necessary.

QUESTION: Have any turbines failed audits Aercoustics has conducted?

- Yes, and manufacturer was required to ensure the turbines were adjusted/fixed to meet noise specifications and were retested to confirm compliance.

COMMENT: Turbines are noisy and can always be heard.

- 40dBA outside does not mean you won't hear it. If your ambient noise is 20dBA then you will hear a noise that is 40 dBA .
- Not the same amount of sound goes in all directions. The noise source is a directional source that is why the emission tests are done on a downward position.

5.0 Topics of Community Interest:

- The following topics of community interest were developed based on emails received in advance of the meeting. The sections below summarize the presentation for each topic and document any additional questions received at the meeting.
 - 5.1 Questions & Concerns – Who to contact
 - 5.2 Project Ownership & Community Investment
 - 5.3 Technical Turbine Questions
 - 5.4 Health-related Questions

Discussion Items

- 5.5 Water Wells
- 5.6 Transmission Line
- 5.7 Guiderail Installation
- 5.8 Tree Replacement Plans

5.1 Contacting NRWF with Questions and Concerns:

- The phone and email for the project will remain unchanged as the project continues into Operations.
- Your Questions and Concerns are welcomed.
- Boralex receives complaints directly and complaints are logged and tracked. Every message received is recorded, reviewed and then distributed/assigned to an appropriate Boralex staff member to answer the question.
- NRWF must report all environmental complaints to the MOECC.
- Complainants receive an acknowledgement within 48 hours.
- To contact the Niagara Region Wind Farm:
 - Phone: 1-844-363-6491
 - Email: info@nrwf.ca
 - Website: www.nrwf.ca (note: the web site will be changing but this address will automatically re-direct to the new web address)
- 911 should always be used as the primary emergency number.
- There is 24/7 emergency number for Boralex which will be posted at the substations. The emergency number will be monitored and answered by a live 24/7 remote monitoring station.

5.2 Project Ownership & Community Investment:

- NRWF is owned and operated by Boralex Inc.
- Six Nations of the Grand River Development Corporation is also a project owner but is not involved in operating the Wind Farm.
- Community Investment: NRWF will spend in excess of \$80 million during the lifetime of the project on such items as taxes, local contractors, land lease agreements, etc.
- Community Fund Agreements exist with West Lincoln, Wainfleet, and Haldimand County and are payable annually on April 30. The Community Fund Agreements with Haldimand and West Lincoln are available on their websites.
- Long-term jobs are created through direct employment with the Operations team including maintenance, monitoring and other support roles and indirect employment opportunities including jobs created at three tower and component manufacturing facilities

QUESTION: Does Daniel Power still have financial interest in the project?

- As of today, they are still owners but their shares are in the process of being sold.

QUESTION: How many complaints have come in?

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- 28 complaints have been called into Boralex and reported to the MOECC.

QUESTION: How many full-time jobs have been created?

- Three (3), full-time Boralex positions (Site manager, turbine technician, electrical coordinator)
- Twenty (20), full-time ENERCON positions (local jobs) for ongoing maintenance
- Additional contractors as needed

QUESTION: How much will the project cost overall?

- Approximately \$1billion dollars.

5.3 Technical Turbine Questions:

- All 77 turbines are the same model – ENERCON E-101 with same height, blade length, etc.
- The nominal power rating of this turbine model is 3MW. 66 turbines operate at 3MW and 11 are de-rated to 2.9MW (T18, 33, 34, 45, 46, 47, 53, 55, 60, 74)
- The minimum wind speed needed to produce electricity is 2 metres per second or greater (up to 28-34m/s).
- Not all turbines are lit as turbines are lit based on Transport Canada requirements. The requirement for lighting depends on location/proximity to the airport.

QUESTION: Have flights been re-routed based on the turbines?

- No, the lights are needed because of Transport Canada requirements to light structures of a certain size and location for safety.

QUESTION: How many revolutions/minute to make electricity?

- Four (4) revolutions/minute (rpm) are required to start producing electricity.

5.4 Health-related Questions:

- There are a number of sources for health-related information about Wind Farms. As requested at the meeting, the following provides available links:
 - Health Canada website www.hc-sc.gc.ca
 - 2014 Health Canada wind turbine noise study: <http://www.hc-sc.gc.ca/ewh-semt/noise-bruit/turbine-eoliennes/summary-resume-eng.php>
 - CanWEA Website <http://canwea.ca/wind-facts/your-health/>
 - Ontario's Chief Medical Officer of Health, CMOH Report, May 2010: http://health.gov.on.ca/en/common/ministry/publications/reports/wind_turbine/wind_turbine.pdf

QUESTION: Have medical officers of health been invited to the meeting?

- No medical officer of health has been invited.

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ACTION: Boralex to invite a medical officer of health to participate in CLC meeting.

COMMENT: The word ‘annoyed’ in the medical community has known health effects.

5.5 Water Wells:

- As a condition of the Projects REA, monitoring is to be completed for all residential water wells within 120 metres of a buried T-line and within 500 metres of a turbine. Annual reports must be submitted to MOECC.
- Home owners in prescribed zones were approached by mail and door-to-door in 2015 and pre-construction samples taken and analyzed from those who elected to participate.
- Boralex contacted 420 properties with wells within 500m of the turbines to offer pre and post water well testing. Only 11 landowners elected to participate.
- For the underground t-line, 113 residents were contacted with mailed-out questionnaires. Not all of the residences had wells on the property. 20 residents accepted to participate in the survey.
- Post-construction surveys are completed for wells within 120m of the buried transmission line. Reports were presented regional instances (NPCA, NEC and Niagara Region). Post-construction sampling has commenced on Mountainview Road near T-line and will commence in 2017 for homes proximal to turbines.
- Final samples are anticipated to be taken in 2018 and reports submitted to MOECC.
- Any specific concerns or issues with water wells should be raised directly with NRWF – please use email and phone contact information provided.

COMMENT: What is being tested in the water? Resident is concern about the implications to water wells based on water well concerns related to a wind-farm in Chatham-Kent

- It has been alleged in Chatham-Kent that the piles of turbines are affecting water wells based on vibrations travelling underground for many kilometres away from the wind farm. This is a unique situation. One study, conducted by a groundwater and hydrogeology engineer, has concluded that there is no rational casual relationship between the turbines and impacts on the Chatham-Kent private wells.
- Boralex is aware of the Chatham-Kent project and is assessing the differences/similarities between the projects.
- General chemistry (e.g. alkalinity, ammonia, chloride, hardness), dissolved metals (e.g. aluminum, arsenic, lead) and bacteria (E. Coli, Fecal Coliform, Total Coliform) were tested for in water wells.

COMMENT: Member of the public disputes that there is not a vibrational issue that impacts earthworms.

QUESTION: Why is it that wells which have been functioning properly for over 50 years are

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now muddy/turbidity?

- It was noted that groundwater and aquifers can change.
- There is no reasonable scientific connection between vibration/sounds causing turbidity in water wells.

5.6 Transmission Line:

- The transmission line was designed as per electrical standards and many factors were taken into account during design as well as when determining pole placement, including:
 - Sight lines & Clear zones
 - Setbacks from private land
 - Drainage
 - Other infrastructure (hydro, telecommunications, pipelines)
- Transmission lines were installed underground in a section on Creek Rd/Regional Rd 45 due to the need to avoid other infrastructure in the right-of-way.
- Any noise-related concerns about the Transmission line should be reported directly to NRWF – please use email and phone contact information provided.

COMMENT: Unsatisfied that Boralex did not purchase additional lands to keep the transmission lines further away from the road.

QUESTION: Why transmission poles installed through new culverts? How does drainage work here?

- The drainage needs to be maintained wherever a pole is located.
- Any culvert had to be installed as per the permit drawing in order to maintain drainage.

ACTION: Boralex to consider a site-specific evaluation of each pole to confirm if any culvert has been destroyed based on construction.

QUESTION: Is the transmission line high voltage?

- Yes the transmission line is a high voltage line (120kV).
- The transmission line poles are steel poles. There are approximately 45 kilometres of transmission line and about 300 poles.
- Typically this type of pole is not used, they are more expensive.
- The poles meet all Electrical Safety Authority and ESA and Canadian Standards Association standards.

QUESTION: What was the cost of the transmission lines above grade? What is the comparison cost of transmission lines below grade? Why is below grade more expensive?

- The cost to bury transmission lines is 7-10 times more expensive than above grade installation.

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- The decisions on where to bury the transmission lines were made prior to Boralex's involvement in the project.
- Materials needed to build the length of transmission underground are very expensive.
- 220km of distribution lines were built underground – Boralex had the choice to build distribution lines above ground, for a cheaper price, but Boralex buried to reduce visual impact of the project.

QUESTION: What happens if a transmission pole goes down?

- Wind farm shuts down by automatically tripping the system instantly, as required by Hydro One and IESO.
- Should this take place, Boralex would immediately call in a subcontractor (Hydro One) to fix the problem; it is treated as an emergency situation to be remediated.
- Hydro One would then bill Boralex for the repair work done.

5.7 Guiderail Installation:

- Installing guiderail is not a choice the project has made but a requirement of road safety guidelines governed by road authorities such as municipal and regional governments.
- Guiderail installed by the project was designed and stamped by Engineers and reviewed and approved by the road authorities such as the Niagara Region and the Township of West Lincoln.
- Upper Canada Consultants (UCC) designed all guiderail installations and has reviewed and signed-off on the safety and completeness of the guiderail installed and provided letters certifying this for the municipal and regional governments.

QUESTION: Where is the guiderail installed in relation to the road right-of-way (ROW)?

- The majority of poles and guiderails are in the municipal ROW and some are on private land.

COMMENT: There are lots of exceptions to many of the guiderails installed. How are exceptions to guiderail standards established/who makes these exception decisions? This is what causes the public to distrust the project when Boralex talks about guidelines/rules but makes many exceptions to the rules.

COMMENT: Safety concern - there is no room on the road to pull over safely due to pole placements and guiderail installation.

QUESTION: Does Boralex have insurance if people are hurt based on accidents with project components?

- Boralex has liability insurance for the equipment installed.
- Culpability is site/situation specific and would be assessed by insurance companies.

QUESTION: Were guiderails part of the original Road Usage Agreement negotiations with the municipalities?

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- Guiderrails are part of the installation of a transmission line where applicable.

ACTION: Boralex to provide Upper Canada Consultants contact info in the meeting minutes.

Upper Canada Planning & Engineering Ltd.
261 Martindale Road, Unit 1
St. Catharines, Ontario, L2W 1A1
Ph. 905-688-9400
Fx. 905-688-5274
www.ucc.com

ACTION: Boralex to provide a list of all consultants who worked on the project from its initial start to present time.

- Stantec
- UCC
- NRSI
- Chimax
- Aercoustics
- Dillon

5.8 Tree Replacement Plans

- In some areas trees were removed or trimmed in the ROW in order to build portions of the project, mainly the transmission line.
- Replacement commitments are part of individual RUAs with municipalities and the Region.
- Currently implementation plans are under review and in discussion with Road Usage Agreements (RUA) parties and once finalized, NRWF will share details via the project's website www.nrwf.ca
- Boralex is committed to sharing tree replacement plans once finalized via the NRWF website.
- Tree replacement commitments to each municipality and Region are set out in individual RUAs
- Any settlement reached with the municipalities must provide an environmental benefit for Boralex to agree to the deal.

QUESTION: What about inadvertent private land tree removals/trimmings – has Boralex dealt with private landowners outside of the RUA (public lands)? What about landowners affect by trees removed on private lands?

- Landowners who have concerns about tree removals on private lands, can contact Boralex to discuss specifics.

Discussion Items

ACTION: Boralex is following up with private landowners and will report back on this item at the next meeting.

ACTION: To address disputes about trees that are partially on public and private lands, Boralex will post a public notice on the project website informing landowners to contact Boralex to discuss.

ACTION: Boralex to consider a request about direct mailing to landowners regarding tree disputes based related to private land.

QUESTION: Is there a dollar value for the 7000 trees lost? Is there a deal in place with West Lincoln for tree replacement?

- Providing trees under the RUA is one way to address replacement with the municipality. There are other options. Options are being discussed as part of the ongoing negotiations.
- There is no deal in place with any municipality at the moment. Negotiations are ongoing.

QUESTION: Does the project pay lease payments to the municipality for using the municipal ROW?

- Yes, Boralex pays lease payments to the municipalities for using the ROW.

6.0 Moving Forward

- Meeting minutes will be available online in 'Community Liaison Committee Documents' <http://www.nrwf.ca/project/>
- Next CLC meeting timeframe:
 - Boralex will continue to offer CLC meetings twice yearly for as long as there is interest moving forward.
 - If any members of the community wish to be part of the CLC they should let Boralex know.
- NEXT CLC MEETING DATE: (To be determined.)

QUESTION: Can CLC meetings be timed quarterly?

- Boralex is going above the requirements of the REA regulation by continuing to host CLC meetings.
- Moving forward CLC meetings will take place twice per year.
- The public can continue to contact the project via the contact info avenues in between the bi-annual CLC meetings.

QUESTION: What happens if someone has had a home appraisal before the project was completed and now after the project has been constructed the value of the home has

Discussion Items

decreased?

- Homeowners can contact Boralex to discuss further.

7.0 Thank you – Closing

- The meeting adjourned at 9:15pm

Project Contact Information

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Errors and/or Omissions

These minutes were prepared by Nadia Galati who should be notified of any errors and/or omissions.