

**ONTARIO ENERGY BOARD (BOARD STAFF) - INTERROGATORY #1**

**Interrogatory**

**References**

EB-2013-0040 Exh B-2-2

EB-2013-0041 Exh B-2-2

**Preamble**

In the first reference, the business and corporate structure of Bornish Wind, LP, Kerwood Wind, Inc. and Jericho Wind, Inc. (the “Co-Owners”) are described for the purposes of the leave to construct application (EB-2013-0040). In the second reference, the business and corporate structure of Kerwood Wind, Inc. (“Kerwood”) is described for the purposes of the leave to construct application (EB-2013-0041). The partners of Bornish Wind, LP, Kerwood Wind, Inc. and Jericho Wind, Inc. are wholly owned subsidiaries of NextEra Energy Canada.

**Questions / Requests**

- a) What experience do the Co-Owners and Kerwood (the “Applicants”) have in the construction and operation of similar types of facilities as that proposed in these applications?
- b) Please indicate what corporate organization capabilities exist to complete the applied for projects.
- c) Please indicate whether the Applicants intend to make use of contractors and provide a summary of their experience in regards to the construction of such projects.

**Response**

- a) NextEra Energy Canada is a wholly owned subsidiary of NextEra Energy Resources LLC (“NEER”), which in turn is a wholly owned subsidiary of NextEra Energy, Inc. (“NextEra”). The Applicants benefit from and can draw upon the vast experience of its affiliates within the NextEra group of companies for purposes of the construction and operation of the proposed transmission facilities. The NextEra group of companies owns, operates and maintains more than 7,300 miles (approx.. 11,750 km) of transmission lines between 69 kilovolts and 500 kilovolts, as well as nearly 800 substations in North America. NextEra has successfully completed the development of transmission projects in a number of different regulatory and geographic environments.
- b) As indicated in response to (a), the Applicants can draw upon the significant corporate organizational capabilities of the NextEra group of companies. NextEra owns, operates

and maintains an extensive network of distribution and transmission lines as well as substations. NextEra also has significant in-house engineering and transmission expertise, which is available to the Applicants in the development, planning, design, construction, operation and maintenance of the proposed transmission facilities. Of particular significance is the Applicants' access to the capabilities of NEER's affiliate, Florida Power & Light Company, which is one of the largest U.S. utility franchises, with over 6,500 miles of transmission and over 4,200 miles of distribution network.

NextEra's strengths in executing large and complex transmission projects include:

**Technical Expertise** – NextEra has technical experience and expertise in the development, engineering, procurement, construction, operations and maintenance of transmission systems and has successfully applied different technologies and a variety of designs in transmission line construction, in a safe and timely manner.

**Operational Excellence** – NextEra operates and maintains complex transmission and distribution systems to ensure safe and reliable operation as well as uninterrupted and efficient electricity service. Extensive diagnostics are used to assess facility conditions, forming the basis to develop plans for asset maintenance and replacement. NextEra's state-of-the-art control centers allow for the maintenance of system reliability in a cost effective manner.

**Financial Capabilities** – NextEra is a leading clean energy company with revenues of approximately \$14.3 billion in 2012, an A-rated investment grade credit rating and substantial experience in financing large electricity infrastructure construction projects.

- c) Yes, the Applicants intend to use contractors to construct the proposed transmission facilities. The transmission line engineering firm of Chimax Inc. has been retained to perform the engineering and design scope of work related to the proposed transmission facilities. An overview of their experience is attached as **Appendix 'A'**. In addition, a request for proposals for the engineering, procurement and construction ("EPC") contractor for the proposed transmission facilities was issued earlier this year and the contract is currently expected to be awarded by July 2013.

**ONTARIO ENERGY BOARD (BOARD STAFF) - INTERROGATORY #2**

**Interrogatory**

**References**

EB-2013-0040 Exh B-3-1

EB-2013-0041 Exh B-3-1

**Preamble**

In July 2011, the OPA awarded contracts under the FIT program in respect of the Bornish, Adelaide and Jericho Projects. At Exh B-3-1, it states that the transmission facilities proposed in the leave to construct applications are needed to connect the projects to the IESO controlled grid.

Board staff notes that on July 4, 2011, the OPA listed the following projects on its website:

Applicant Legal Name	Project Name
Boulevard Associates Canada Inc.	Jericho Wind Energy Centre
Bornish Wind, LP	Bornish Wind Energy Centre
Summerhaven Wind, LP	Adelaide Wind Energy Centre

### **Questions / Requests**

Please confirm whether the FIT contracts for the Jericho Wind Energy Centre and the Adelaide Wind Energy Centre have been re-assigned, or explain the relationship of Boulevard Associates Canada Inc. and Summerhaven Wind, LP to the Applicants.

### **Response**

Although the application for a FIT contract in respect of the Jericho Wind Energy Centre was initially filed by Boulevard Associates Canada Inc., a reorganization occurred during the application period and the FIT contract in respect of this project was in fact issued directly to Jericho Wind, Inc. on July 13, 2011 (FIT Contract #F-002172-WIN-130-601). The FIT Application was assigned by Boulevard to Jericho on May 31, 2011. The listing on the OPA's website, as referenced in Exhibit B, Tab 3, Schedule 1 refers to the name of the initial FIT contract applicant rather than the FIT contract recipient.

Similarly, although the application for a FIT contract in respect of the Adelaide Wind Energy Centre was initially filed by Summerhaven Wind, LP, a reorganization occurred during the application period and the FIT contract in respect of this project was in fact issued directly to Kerwood Wind, Inc. on July 13, 2011 (FIT Contract #F-002176-WIN-130-601). The FIT Application was assigned by Summerhaven to Kerwood on May 31, 2011. The listing on the OPA's website, as referenced in Exhibit B, Tab 3, Schedule 1 refers to the name of the initial FIT contract applicant rather than the FIT contract recipient.

**ONTARIO ENERGY BOARD (BOARD STAFF) - INTERROGATORY #3**

**Interrogatory**

**References**

EB-2013-0040 Exh B-1-1 page 6, Exh E-2-1

EB-2013-0041 Exh B-1-1 page 4, Exh E-2-1

**Preamble**

None.

**Questions / Requests**

- a) The Co-owners filed the REA submission for the Bornish and Co-Owner project on July 25, 2012. It was deemed complete on Oct 9, 2012. In the pre-filed evidence, the Co-owners state that a decision from the MOE in relation to the REA application is expected in April 2013. Have the Co-owners received a decision from the MOE in relation to its REA application?
- b) Similarly, Kerwood filed the REA submission for the Adelaide project on August 23, 2012. It was deemed complete on November 29, 2012. In the pre-filed evidence, Kerwood states that a decision from the MOE in relation to the REA application is expected in May 2013. Has Kerwood received a decision from the MOE in relation to its REA application?
- c) Have there been any objections to the granting of the REA and if so by which parties? What has been the general nature of the concerns that have been raised?
- d) If applicable, please file a copy of the REA approvals.

**Response**

- a) Yes. This REA was received from the Ministry of the Environment on April 26, 2013.
- b) No. This REA has not been issued to Kerwood yet. It is expected to be issued in late May 2013.
- c) It was open to third parties to file appeals of the REA by May 11, 2013, which date was 15 days from the date that the REA decision was posted on the Environmental Registry on April 26, 2013. During this period, 2 appeals were filed. These appeals were filed by the Municipality of North Middlesex and Mr. Robert Lewis. Based on the Notices of

Appeal received, the general nature of the concerns raised by the Municipality are related to the health impacts of wind turbines and the general nature of the concerns raised by Mr. Lewis are related to environmental matters including species at risk, habitat loss and collision mortality due to operation of the wind turbines.

- d) A copy of the Bornish REA is provided in **Appendix 'B'**.

**ONTARIO ENERGY BOARD (BOARD STAFF) - INTERROGATORY #4**

**Interrogatory**

**References**

EB-2013-0040 Exh B-1-1 page 4, Exh F-1-1

**Preamble**

At Exh B-1-1, the Co-owners state that the Bornish Collection Substation (“BCS”), the Bornish Customer Switching Station (“BCSS”) and the Parkhill Customer Transformer Station (“CTS”) will be located on private land and that the Co-owners have secured the necessary private land rights for the proposed stations.

At Exh F-1-1, it states that the 13 acres for the Parkhill CTS has been purchased by the Co-owners. The Co-owners have entered into an option to purchase agreement for the 2 acres for the BCS and the 1.5 acres for the BCSS.

**Questions / Requests**

What is the current status of the land acquisition for BCS and BCSS?

**Response**

The status of the land acquisition for the BCS and the BCSS has not changed since the Application was filed. Bornish continues to hold, but has not yet exercised, its option to purchase the relevant lands.

**ONTARIO ENERGY BOARD (BOARD STAFF) - INTERROGATORY #5**

**Interrogatory**

**References**

EB-2013-0041 Exh B-1-1 page 3, Exh B-2-1, Exh F-1-1

**Preamble**

At page 3 of Exh B-1-1, it states that:

[Kerwood] proposes to locate the Adelaide Collection Substation on private lands. To this end, the necessary private land rights have been secured. In particular, Bornish has entered into a Purchase and Sale Agreement for the relevant property. Although this transaction has not yet closed, it is intended that Bornish will convey the property to Kerwood prior to the commencement of construction.

**Questions / Requests**

- a) What is the current status of the land acquisition for the Adelaide Collection Substation?
- b) If the transaction has closed, has the property been conveyed to Kerwood? If not, when will Bornish convey the property to Kerwood?

**Response**

- a) The status of the land acquisition for the Adelaide Collection Substation has not changed since the Application was filed. The Purchase and Sale Agreement entered into by Bornish has not yet closed.
- b) As described in the Application, Bornish will convey the property to Kerwood subsequent to the closing of the purchase transaction and prior to the commencement of construction. A specific date for closing has not yet been determined.



**ONTARIO ENERGY BOARD (BOARD STAFF) - INTERROGATORY #6**

**Interrogatory**

**References**

EB-2013-0040 Exh B-4-1

**Preamble**

At page 2 of Exh B-4-1 of the Co-owner's application, it states that:

More specifically, with the exception of the short segments of the Transmission Line that run between the Bornish CSS and the municipal road ROW, as well as between the municipal road ROW and the Parkhill CTS, the proposed Transmission Line route will run entirely within the municipal ROWs along Kerwood Road and Elginfield Road/Nairn Road.

**Questions / Requests**

Have the Co-owners acquired land rights related to the exceptions noted above?

**Response**

Yes. The land rights related to the exceptions noted above are included in the lands purchased for the Parkhill CTS and the lands for which the Applicant holds an option to purchase in respect of the Bornish CSS, respectively.

**ONTARIO ENERGY BOARD (BOARD STAFF) - INTERROGATORY #7**

**Interrogatory**

**References**

EB-2013-0040 Exh G-1-1

**Preamble**

At Exh G-1-1 for EB-2013-0040, it states:

NextEra has been in discussion with County staff regarding a Road User Agreement for the right-of-way use for these transmission lines since early 2012. In November 2012, NextEra Energy Canada on behalf of the [Co-Owners] met with representatives of ... the Middlesex County delegation during their public proceedings [and] a County Council meeting on behalf of Bornish, Adelaide, and Jericho to more formally request to enter into such a Road User Agreement with the County. Bornish and Adelaide Kerwood expect to work towards finalizing these Road User Agreements with the County and Municipalities throughout the first quarter of 2013.

**Questions / Requests**

Have the Road User Agreements been finalized? If not, what is the status?

**Response**

The Applicants anticipate that separate Road User Agreements will be entered into by each of Bornish, Kerwood and the Co-owners with the County.

The Road User Agreements between the County and each of Kerwood and the Co-owners, which will relate to the proposed transmission facilities, have not yet been finalized. Although the County had indicated that a draft was forthcoming as of late 2012, the draft was not provided until April 15<sup>th</sup>, 2013. The Applicants are currently reviewing the draft agreement and will continue to work with the County to negotiate final agreements.

As Bornish will not individually own or operate any transmission lines along County ROWs, the Bornish Road User Agreement is not relevant to this proceeding. Additional Road User Agreements are anticipated by Bornish with the Municipality of North Middlesex and by Kerwood with the Township of Adelaide Metcalfe. However, as no transmission facilities will be

located in ROWs owned by either of these municipalities (the transmission facilities will only be in the County's ROWs), such Road User Agreements are not relevant to this proceeding.

**ONTARIO ENERGY BOARD (BOARD STAFF) - INTERROGATORY #8**

**Interrogatory**

**References**

EB-2013-0040 Exh B-4-1

**Preamble**

At pages 3 and 4 of Exh B-4-1, the Co-owners state that within the Elginfield Road/Nairn Road ROW, the proposed 12.6 km transmission line would run generally along the south side of Elginfield Road/Nairn Road ROW between Kerwood Road and the Parkhill CTS with two exceptions. One of the proposed exceptions is related to Bell Canada overhead telecommunications facilities (0.67 km) and the other is related to Hydro One distribution facilities (0.16 km). The application states that:

Along each of these discrete segments where the [Co-owners] plans to locate the Transmission Line along the north side of the ROW, there are no Hydro One distribution facilities or other existing overhead utilities running along the north side of the ROW. While it is the intent of the [Co-owners] to locate the Transmission Line as described above, the final location of the facilities within the ROW will be subject to final engineering and design. For this reason, the [Co-owners'] request is not limited to the specific design within the ROW. As a result, the route for which the [Co-owners] seek approval is defined more broadly to include either side of the road in the ROW in the event of any future accommodation by Hydro One or Bell Canada as to location.

**Questions / Requests**

- a) Please confirm whether the routing that was identified for the REA specifically identified the cross overs as described on pages 3 and 4 of Exh B-4-1.
- b) Are any other cross overs anticipated?

**Response**

- a) The cross overs are located within the area that is covered by the REA, but were not specifically identified therein. Section 2.1.3 of the REA Project Description Report says:

A 115 kV transmission line will link the Project's substation to the adjacent switchyard which will collect power from this Project as

well as NextEra's Adelaide and Jericho Wind Energy Centres. The transmission line will travel east along Elginfield and Nairn Roads within the municipal rights-of-way to an existing Hydro One 500 kV transmission line.

The REA does not limit the transmission line routing to a specific side of the ROW in any particular location along the proposed route.

- b) The routing described in the Application included all cross overs anticipated at that time of filing. As described in response to County IR #11, there will be two fewer crossings along the transmission line route proposed in EB-2013-0040 as a result of Bell Canada agreeing to bury certain existing infrastructure along the proposed route.

**ONTARIO ENERGY BOARD (BOARD STAFF) - INTERROGATORY #9**

**Interrogatory**

**References**

EB-2013-0040 Exh B-4-1

**Preamble**

The pre-filed evidence of the Co-owners states:

Furthermore, it is not currently anticipated that private lands adjacent to the ROW will be required. However, through final engineering and project planning it may be determined that the use of certain lands adjacent to the municipal road ROW is necessary for construction, access or other purposes. As such, the Applicant also requests the Board's approval for the **potential use of such adjacent lands** for these purposes. [emphasis added]

**Questions / Requests**

Please prepare a table summarizing the following for the adjacent lands:

- PIN, Lot and Concession numbers
- Identify the type of easement that is required and the size of the easement
- Identify the status of negotiations

**Response**

As described in the Application, the Applicant believes that it can build the transmission line to meet all required standards with the line located solely within the County ROW. Through consultations with the County, the Applicants have identified a preference for the transmission facilities to be situated as close to the edge of the ROW as practicable. In an effort to accommodate this preference, the Applicants have continued to seek agreements with adjacent landowners that would allow for the possibility of the facilities overhanging such adjacent properties.

The Applicant identified all of the adjacent properties in the Application strictly as a contingency in the event that an unanticipated constraint to the current design arises, which requires the Applicant to instead use one or more of the non-contiguous private easements that the Applicant already has executed, or potentially to seek authorization to expropriate rights in such adjacent lands where no agreement could be reached. For these reasons, the Applicant considers the

adjacent lands to include all lands in the table below, for which – in the unlikely situation contemplated above – the Applicant could potentially need either a transmission easement or an overhang easement. The Applicant wishes to stress, however, that these are included merely as contingency measures and that it is of the view that there are no technical constraints to locating the transmission line entirely in the ROW without relying upon any of the agreements that are in place with adjacent landowners. This is consistent with the typical leave to construct condition of securing all necessary easements and other land rights required for construction and operation of the approved facilities.

Please see the requested table in **Appendix ‘C’**.

**ONTARIO ENERGY BOARD (BOARD STAFF) - INTERROGATORY #10**

**Interrogatory**

**References**

EB-2013-0040 Exh B-4-1, pages 4-5

**Preamble**

Along approximately 79% of the proposed transmission line corridor, there are existing Hydro One distribution poles within the ROW. The evidence states that the Co-owners consulted extensively with Hydro One concerning the Co-owners' interest in co-locating. Hydro One advised that it will not accommodate requests for joint use of distribution poles to support transmission voltage lines.

**Questions / Requests**

- a) Given the proposed Transmission Line will be sharing the right of way or will be in close proximity to Hydro One's distribution lines, please provide a summary of the discussions that the Co-owner has had with Hydro One in relation to this matter. Please identify any concerns that may have been noted by Hydro One in regards to this matter and what measures have been taken by the Co-owner to alleviate Hydro One's concerns. Please identify whether any agreements with Hydro One will be required, and if so, the status of those agreements.
- b) Please indicate the design and construction standards and procedures, relating to proximity and effects such as induction, which will protect pre-existing facilities and personnel from direct and induced currents and voltages. Include in your discussion corrosion protection, cable location identification, and grounding for safety and "tingle" or "stray" voltage.

**Response**

- a) The Applicants have met with Hydro One on this topic on a number of occasions. These discussions have generally gone well and the main concerns expressed by Hydro One have been in relation to:
  - Protocols for Emergency Response to a downed line in the ROW;
  - Protocols for coordination of work being done by either party on infrastructure in the ROW;
  - Addressing safety concerns related to "secondary conductors" (customer service drops) being crossed by the Applicant's proposed transmission line; and



- The allocation of any future increased costs for the installation of new customer service drops.

The Applicant does not currently anticipate any issues in resolving these concerns through an agreement to be entered into with Hydro One, although the timing for finalizing such agreement has not yet been determined. Both parties are of the view that the separation of the parallel lines and the fact that any crossings are perpendicular will minimize any induced currents, voltages or “stray” voltage in the Hydro One system.

- b) Generally, proximity and effects such as induction are not problematic where 115 kV transmission facilities are situated on the opposite side of a road from distribution facilities. The measures undertaken or to be undertaken by the Applicants to address any potential risks are as follows:

- **Design and Standards.** The line design will comply with the Electrical Safety Authority's minimum electrical clearance requirements and maximum induction requirements.
- **Corrosion Protection.** At this time the only known pre-existing facilities that may require corrosion protection are gas lines. The only known owner of gas line(s) along the route will be contacted for corrosion protection discussions.
- **Cable Location Identification.** The construction contractor building the line will be responsible for calling in for locates (Ontario One Call). More in-depth underground location investigation may take place if there is a suspicion of pre-existing underground cables or any other underground facility such as gas lines and/or communication cables in the vicinity of a proposed pole location.
- **Grounding.** The grounding study is not yet complete but each pole will have provision for ground rod installation. Ground rods will be installed wherever it is determined to be necessary.
- **Stray Voltage.** Stray voltage is typically caused by voltages in the neutral (also known as the ground) conductor on distribution lines - the lines that serve houses and farms. Stray voltage can reach homes and farms when a system is improperly grounded.

Stray voltages on the distribution line's neutral conductor can be caused by a number of factors, including poor grounding of the neutral conductor and induction from current flowing nearby. Typically, the closest conductors to a neutral are in the phase conductors of the distribution line. Changes to the

currents flowing through these conductors may induce a new voltage in the neutral that wasn't previously present. These changes can be caused by any change to the system, including connecting a new generation facility to the distribution lines.

In this case, the Applicant is not proposing to connect to the distribution system, so the Applicant's connection will not cause stray voltage by changing the use of the existing distribution phases. Similarly, both the Applicant and HONI are of the view that the separation between the applicant's conductors and the neutral on HONI's distribution line is sufficient to avoid induced current on that neutral. For these reasons Stray voltage is not expected to be caused by the proposed facilities.

**ONTARIO ENERGY BOARD (BOARD STAFF) - INTERROGATORY #11**

**Interrogatory**

**References**

EB-2013-0040 Exh B-4-1, pages 5-6 and Exh G-1-1

**Preamble**

At Exh B-4-1, it states:

Through consultations with potentially affected landowners, the [Co-owners] found that there was a strong preference from landowners for locating the line along the back (south) side of their properties rather than along the front part of their properties abutting the Elginfield Road/Nairn Road ROW. ...

The [Co-owners] pursued the additional environmental studies that would be needed to include the back country route within its REA, with a view to potentially seeking an amendment to its REA submission. The preliminary environmental reviews for the back country route showed that, relative to the proposed Transmission Line route within the municipal road ROW, a significant amount of tree removal and vegetation clearing, including through woodlots and wetlands, would be required to support this alternative. In addition, it was ultimately determined that the length of time needed to finalize the studies and to obtain the necessary approvals for such an amendment was not compatible with the project schedule.

Exh G-1-1 summarizes community and stakeholder consultations starting in February 2008 and continuing to July 2012. With respect to these community consultations and the REA submission filed on July 25, 2012:

**Questions / Requests**

- a) When was the preference for the back country routing first identified?
- b) When were the preliminary environmental reviews for the back country route completed?
- c) What was the estimated length of time needed to finalize the studies and to obtain the necessary approvals for the back country routing?

**Response**

- a) During initial conversations with landowners along the route, both the back country route and the route along the road were discussed, starting as early as November 2011. The

Applicant was initially focused on the back-country route as their experience showed that most landowners would prefer such a route. The route along the road was initially identified as a contingency in the event that the Applicant was unable to sign all landowners required for the back-country route.

- b) Preliminary environmental and archaeological field studies on the back-country route progressed (depending on the season) as property access became available. Studies on the back-country route began as early as March 2012 and – to the extent they were started – were completed by October 2012.
- c) The estimated length of time needed to finalize the studies and obtain the necessary approvals to submit an REA Amendment for the back country routing is 4 months. Once received, the MOE typically takes 2-4 months to process an REA amendment, which may be extended if the MOE determines that additional public consultation is required. A delay of such duration would jeopardize the Applicants' ability to meet a commercial operation date of July 2014, as required under their Feed-in Tariff contract with the Ontario Power Authority.

**ONTARIO ENERGY BOARD (BOARD STAFF) - INTERROGATORY #12**

**Interrogatory**

**References**

EB-2013-0041 Exh F-1-1

**Preamble**

In Kerwood's application, it states:

With the exception of the segments of the Transmission Line between the municipal road ROW and each of the Adelaide Collection Substation and the Bornish Customer Switching Station, [Kerwood] plans for the Transmission Line to run exclusively within the municipal road ROW along Kerwood Road.

**Questions / Requests**

Has Kerwood acquired land rights related to the exceptions noted above?

**Response**

Yes. The land rights related to the exceptions noted above are included in the lands for which Bornish holds an option to purchase in respect of the Bornish CSS and for which an Agreement of Purchase and Sale has been entered into by Bornish in respect of the Adelaide CS (which as indicated will be transferred to Kerwood prior to construction).

**ONTARIO ENERGY BOARD (BOARD STAFF) - INTERROGATORY #13**

**Interrogatory**

**References**

EB-2013-0041 Exh B-4-1, page 1

**Preamble**

Kerwood states that it:

... identified a number of constraints on the range of potential transmission routes. In addition to addressing these constraints, the Applicant has made refinements along the route corridor to the extent feasible in order to address stakeholder concerns and other issues.

**Questions / Requests**

Please identify/specify the constraints and the refinements referred to in Exh B-4-1.

**Response**

The constraints and refinements are discussed at pp. 2-4 of Exhibit B, Tab 4, Schedule 1. These include the limited number of available crossings of the Ausable River in the project area in combination with the need for the transmission line to run from the Adelaide Collection Substation south of the Ausable River to the Bornish Customer Switching Station north of the Ausable River, the potential environmental impacts of establishing a new river crossing, the inability to secure private land rights that would support a contiguous route, the presence of Hydro One distribution facilities within the ROW, Hydro One's position that it cannot accommodate joint use of its distribution poles for transmission lines, the presence of Bell Canada overhead facilities and the need for final engineering and design.

**ONTARIO ENERGY BOARD (BOARD STAFF) - INTERROGATORY #14**

**Interrogatory**

**References**

EB-2013-0041 Exh B-4-1, pages 3-4 and Exh F-1-1

**Preamble**

Kerwood has concluded that the Kerwood Road crossing of the Ausable River is the most direct route affecting the smallest number of people for the proposed 10.8 km line. At Exh B-4-1, Kerwood states that it has:

... investigated the possibility of obtaining private easements immediately adjacent to Kerwood Road and has also considered the options available to it with respect to the use of the municipal road rights-of-way (“**ROWS**”) along this corridor. Based on this analysis and related consultations with affected landowners and stakeholders, [Kerwood] is currently planning for the route to run entirely within the municipal road ROW.

As summarized in Exh F-1-1, Kerwood is planning to construct the transmission line on the opposite side of the ROW from existing Hydro One distribution facilities while remaining within the municipal road ROW. Exh B-4-1 notes two options for the route crossing the Ausable River to accommodate Bell Canada facilities. Exh F-1-1 describes four cross overs from one side of the ROW to the other.

**Questions / Requests**

- a) Have the Road User Agreements been finalized with the Municipality? If not, what is the status?
- b) Please confirm the routing across the Ausable River with respect to the Bell Canada facilities. Please identify whether any agreements with Bell Canada will be required, and if so, the status of those agreements.
- c) Please confirm whether the routing that was identified for the REA specifically identified the cross overs as described in Exh F-1-1.
- d) Please confirm whether any other cross overs are anticipated.

**Response**

- a) Kerwood Road is a County-owned road. Please see response to Board Staff Interrogatory #7.
- b) The transmission line will cross the river on the opposite side of the Bell facilities. As such, the Applicant does not anticipate that any agreements with Bell Canada will be required in respect of this location of the route.
- c) Section 2.1.3 of the REA Project Description Reports says:

The 115 kV transmission line that will be built from the Project substation to the switchyard is proposed to be located within the existing road right-of-ways along Kerwood Road. From there, the transmission line will travel east along Elginfield and Nairn Roads within the municipal rights-of-way to an existing Hydro One 500 kV transmission line.

The REA does not limit the transmission line routing to a specific side of the ROW in any particular location along the project route.

- d) The routing described in the Application included all cross overs anticipated at that time of filing. As described in response to Intervenor Group IR #3, the Applicant has approached Hydro One concerning the possibility of burying its distribution facilities in the vicinity of the “Store” near Keyser. Assuming that Hydro One agrees to make such change, one of the cross overs along the proposed transmission route would be moved further south of the store. However, the total number of cross overs required would not change.



**ONTARIO ENERGY BOARD (BOARD STAFF) - INTERROGATORY #15**

**Interrogatory**

**References**

EB-2013-0041 Exh B-4-1, page 4

**Preamble**

Kerwood states that its:

... request for approval is not limited to the specific design within the ROW. Rather, [Kerwood] seeks approval for a route that includes either side of the Kerwood Road ROW. Furthermore, it is not currently anticipated that private lands adjacent to the ROW will be required. However, through final engineering and project planning it may be determined that the use of certain lands adjacent to the municipal road ROW is necessary for construction, access or other purposes. As such, [Kerwood] also requests the Board's approval for the potential use of such adjacent lands for these purposes.

**Questions / Requests**

Please prepare a table summarizing the following for the adjacent lands

- PIN, Lot and Concession numbers
- Identify the type of easement that is required and the size of the easement
- Identify the status of negotiations

**Response**

See response to Board Staff IR #9, as well as the requested table in **Appendix 'D'**.

**ONTARIO ENERGY BOARD (BOARD STAFF) - INTERROGATORY #16**

**Interrogatory**

**References**

Ref: EB-2013-0041 Exh B-4-1, page 4

**Preamble**

Along approximately 60.5% of the proposed transmission line corridor, there are existing Hydro One distribution poles within the ROW. The evidence states that Kerwood consulted extensively with Hydro One concerning Kerwood's interest in co-locating. Hydro One advised that it will not accommodate requests for joint use of distribution poles to support transmission voltage lines.

**Questions / Requests**

- a) Given the proposed Transmission Line will be sharing the right of way or will be in close proximity to Hydro One's distribution lines, please provide a summary of the discussions that [Kerwood] has had with Hydro One in relation to this matter. Please identify any concerns that may have been noted by Hydro One in regards to this matter and what measures have been taken by [Kerwood] to alleviate Hydro One's concerns. Please identify whether any agreements with Hydro One will be required, and if so, the status of those agreements.
- b) Please indicate the design and construction standards and procedures, relating to proximity and effects such as induction, which will protect pre-existing facilities and personnel from direct and induced currents and voltages. Include in your discussion corrosion protection, cable location identification, and grounding for safety and "tingle" or "stray" voltage.

**Response**

- a) See response to Board Staff Interrogatory #10(a).
- b) See response to Board Staff Interrogatory #10(b).

**ONTARIO ENERGY BOARD (BOARD STAFF) - INTERROGATORY #17**

**Interrogatory**

**References**

EB-2013-0040 Exh C-1-1 and Exh E-2-1

EB-2013-0041 Exh C-1-1 and Exh E-2-1

**Preamble**

None.

**Questions / Requests**

- a) At Exh E-2-1 the Applicants have listed potentially applicable permits, approvals and authorizations. Please specify
- which permits/approvals are necessary prior to the commencement of construction of the transmission facilities,
  - whether any of the permits/approvals are interdependent
  - the current status and timelines for obtaining necessary permits/approvals
- b) The Applicants have provided Gantt Charts summarizing milestone dates. Please update these charts if the dates for the noted events have changed.

**Response**

- a) Prior to the commencement of construction of the transmission facilities, the Applicant will require the following approvals:

Government	Authority	Potentially Required Permit or Approval	Required Prior to Construction?	Status/Timeline
Federal	Fisheries and Oceans Canada	Authorization under Subsection 35(2) of the <i>Fisheries Act</i> for watercourse crossings (or Letter of Advice)	No	Not anticipated to be required for these facilities

Government	Authority	Potentially Required Permit or Approval	Required Prior to Construction?	Status/Timeline
Provincial	Ministry of Natural Resources	Approval and permitting requirements under the Renewable Energy Approval process	Yes	Received
Provincial	Ministry of Natural Resources	Species at Risk Permit under the <i>Endangered Species Act</i> (if designated species habitat is impacted, which is to be confirmed)	No	Not anticipated to be required for these facilities
Provincial	Conservation Authorities	Generic Regulations Permit for water crossings and works within floodplain	No	Not anticipated to be required for these facilities
Provincial	Ministry of Tourism, Culture and Sport	Archeological and Cultural Heritage Clearances under the <i>Heritage Act</i>	Yes. Stage 2 clearance required prior to submission of REA. Location-specific State 3/4 clearances to be obtained prior to breaking ground at relevant locations	Stage 3 and 4 field work and report writing in progress
Provincial	Ministry of Transportation	Compliance with the <i>Highway Traffic Act</i> and <i>Road Safety Regulations</i> - Highway Entrance Permit, Transportation Permits (e.g. Oversize, Overweight Permit)	No	-

Government	Authority	Potentially Required Permit or Approval	Required Prior to Construction?	Status/Timeline
		or Special Vehicle Configuration Permit), Crossing Permits		
Provincial	Ontario Energy Board	Notice of Proposal under Section 81 of the <i>Ontario Energy Board Act</i>	No	Concurrent with or subsequent to filing of generator license application
Provincial	Ministry of Labour	Notice of Project prior to commencing construction (to be obtained by contractor)	Yes	Not applied for – will be closer to construction
Provincial	Hydro One Networks Inc.	Transmission Connection Agreement	No	Will be negotiated closer to commercial operation date
Provincial	Independent Electricity System Operator	Facility Registration	No	Will be registered closer to commercial operation date
Provincial	Independent Electricity System Operator	Metering Registration	No	Will be registered closer to commercial operation date
Provincial	Independent Electricity System Operator	Connection Assessment Approval	Yes	Received
Provincial	Electrical Safety Authority	Connection Authorization	No	-
Municipal	County and Municipal Governments	Road Use Agreements and/or Building Permits (as	Yes (as applicable)	Applications to be submitted closer to construction

<b>Government</b>	<b>Authority</b>	<b>Potentially Required Permit or Approval</b>	<b>Required Prior to Construction?</b>	<b>Status/Timeline</b>
		applicable)		commencement

To the Applicant's knowledge, although not required it has been common practice for building officials to require an REA to be in place prior to issuing building permits. Moreover, as the Board typically makes the granting of leave to construct conditional upon all other permits and approvals required for construction being obtained, it is expected that there will be interdependencies between each of these permits and approvals that are required for construction and the leave to construct. In addition, the clearances from the Ministry of Natural Resources and the Ministry of Tourism, Culture and Sport are prerequisites to the issuance of the REA by the Ministry of the Environment.

- b) There have been no material changes to the project schedule.

**ONTARIO ENERGY BOARD (BOARD STAFF) - INTERROGATORY #18**

**Interrogatory**

**References**

EB-2013-0040 Exh F-2-1

EB-2013-0041 Exh F-2-1

**Preamble**

None.

**Questions / Requests**

- a) Please confirm that the forms of land agreements provided in Exh F-2-1 are the agreements that the Applicants have used for the acquisition of land rights.
- b) Are there any other forms of land agreements that have been used or that the Applicants intend to use?
- c) Have landowners expressed any concern with the forms of land agreements? If yes, please summarize the concerns that were noted with respect to the option/easement agreements. What steps have the Applicants taken to alleviate these concerns?
- d) Have the Applicants offered and/or provided any legal compensation to landowners to cover legal costs for those who wished to have their form of land agreement reviewed by a legal consultant, or counsel? If not, would it be prepared to do so for the acquisition of any outstanding land rights?

**Response**

- a) Confirmed.
- b) No.
- c) With one exception, the concerns raised by landowners have been property-specific and not with the forms of land agreements. This exception is with respect to provisions relating to tree removal where landowners have requested revisions with respect to compensation and/or tree replacement. The Applicants have considered these requests on a property by property basis.
- d) The Applicants have offered and provided compensation to landowners to cover all or part of the legal costs for landowners who wished to have agreements offered to them

reviewed by legal counsel. The Applicants continue to be willing to offer and pay for compensation for this purpose.



**ONTARIO ENERGY BOARD (BOARD STAFF) - INTERROGATORY #19**

**Interrogatory**

**References**

EB-2013-0040 Exh H-2-1

EB-2013-0041 Exh H-2-1

**Preamble**

Page 2 of the System Impact Assessment Report (December 21, 2011) and page 1 of the SIA Addendum (June 6, 2012) set out the requirements that are applicable to Hydro One (the transmitter) for the incorporation of the proposed projects.

**Questions / Requests**

- a) Please provide cost estimates and cost responsibility for the noted upgrades. If necessary, please consult Hydro One for the purposes of completing this interrogatory.
- b) Please submit the Connection Cost Recovery Agreements, when finalized.
- c) Please confirm that the Co-Owners and Kerwood are responsible for the total cost of the facilities proposed in the applications and that it will have no impact on transmission rates in Ontario.

**Response**

- a) The cost estimates and cost responsibility for the noted upgrades are documented in the Connection Cost Recovery Agreement (CCRA) entered into with Hydro One, which is provided in response to (b), below. Schedule 'A' of the CCRA sets out the scope of work that is chargeable by Hydro One to the Generator Customer and states that the scope of the work is based on the requirements from the SIA Report and the SIA Addendum, as well as on Hydro One's CIA Report and CIA Addendum. The cost estimate for the Hydro One Work, which includes the work required by the SIA reports, is set out in Schedule 'D' of the CCRA. Section 12.1 of the Standard Terms and Conditions that are incorporated by reference into the CCRA specifies that the Generator Customer shall pay Hydro One a Capital Contribution for the Work Chargeable to the Generator Customer and any Additional or Modified Work Chargeable to Generator Customer. More specifically, section 12.1 states that the Generator Customer must pay the estimated Capital Contribution set out in Schedule 'D' and that, subsequent to completion of the work, Hydro One will issue an invoice or credit memorandum to the Generator Customer

based on Hydro One's actual costs of doing the work. For cost estimates, please see response to (b), below.

- b) A copy of the CCRA is provided in **Appendix 'E'**. Please note that the CCRA has been filed in accordance with the Board's *Practice Direction on Confidential Filings*. The CCRA is commercially sensitive, includes financial information and is required to be treated as confidential in accordance with its terms. In particular, section 24 of the Standard Terms and Conditions of the CCRA provides that the Generator Customer is required to keep "Confidential Information" confidential, where "Confidential Information" includes the terms of the Agreement and the operations and dealings under the Agreement.
- c) Confirmed.

**ONTARIO ENERGY BOARD (BOARD STAFF) - INTERROGATORY #20**

**Interrogatory**

**References**

EB-2013-0040 Exh B-1-1

Ref: Transmission System Code (“TSC”), June 10, 2010, Section 4.1.1 and Appendix 1 – Version B, Form of Connection Agreement for Generator Customers

**Preamble**

At Exh B-1-1, the transmission and interconnection facilities related to EB-2013-0040 are described. The Co-owners (Bornish Wind, LP, Kerwood Wind, Inc. and Jericho Wind, Inc.) will own the Bornish Customer Switching Station (“BCSS”), a 12.6 km single circuit 115 kV transmission line, and the Parkhill Customer Transformer Station (“Parkhill CTS”).

Section 4.1.1 of the TSC requires that Hydro One enter into a connection agreement with customers directly connected to the transmission system. For generation customers, the form of the agreement is provided at Appendix 1, Version B of the TSC.

**Questions / Requests**

- a) As the BCSS, transmission line and Parkhill CTS will be co-owned by three subsidiaries of NextEra Energy, please confirm whether each of the subsidiaries will conclude a connection agreement with Hydro One.
- b) If the answer to (a) above is affirmative, please indicate the status of these agreements with Hydro One.
- c) If the answer to (a) above is that the subsidiaries are not pursuing three connection agreements with Hydro One, please explain how the TSC’s requirements and provisions would be binding on three wind generation projects. Please refer to the response to Interrogatory 2 and provide additional explanation if required.

**Response**

- a) The NextEra Energy subsidiaries do not expect to conclude separate connection agreements with Hydro One.
- b) Not applicable.

- c) A single connection agreement will be entered into with Hydro One on the same basis as was the CCRA, which was by Kerwood Wind, Inc., Jericho Wind, Inc. and Bornish Wind, LP, jointly and severally. This is consistent with the requirements under the Transmission System Code (the “Code”), as applicable to a licensed transmitter, such as Hydro One, that is connecting a customer that is an unlicensed transmitter, such as the Co-owners. In the Code, a “customer” refers to a generator, consumer, distributor or an unlicensed transmitter whose facilities are connected to or are intended to be connected to a licensed transmission system. The Co-owners, as tenants in common, have indivisible ownership interests in the transmission facilities and are unlicensed transmitters. Their interests are not separate interests to the transmission facilities. As such, Hydro One will under the Transmission System Code enter into a connection agreement with the unlicensed transmission system owners and not multiple agreements.

**ONTARIO ENERGY BOARD (BOARD STAFF) - INTERROGATORY #21**

**Interrogatory**

**References**

EB-2013-0040 Exh D-1-1 page 6

**Preamble**

In the pre-filed evidence, the Co-owners discuss the potential interconnection of a third party renewable generator:

Suncor Energy Products Inc. (“Suncor”) is the proponent of a proposed renewable energy generation facility of up to 100 MW located in Lambton County (the “Suncor Energy Cedar Point Wind Power Project”). The planned location for the Suncor Energy Cedar Point Wind Power Project is in close proximity and to the west of the Jericho Project site. As such, there is a possibility that Suncor may connect the Suncor Energy Cedar Point Wind Power Project to the IESO-controlled grid through the planned Jericho transmission facilities (which will be the subject of a future Section 92 application by Jericho), together with those components of the present Application that will be owned by the Co-Owners. The potential connection of the Suncor Energy Cedar Point Wind Power Project has been considered in the SIA Addendum Report provided in Exhibit H, Tab 2, Schedule 1, Appendix C, as well as in the CIA Addendum Report provided in Exhibit H, Tab 3, Schedule 1, Appendix B. The Applicants do not intend for Suncor to become a co-owner of any of the Proposed Transmission Facilities and the Applicant will continue to be exempt under Ontario Regulation 161/99 with respect to the requirement to obtain a licence to own or operate transmission facilities. To the extent Suncor utilizes the Proposed Transmission Facilities, they will do so as a licensee.

**Questions / Requests**

- a) What is the status of the potential connection of the Suncor Project through the Jericho transmission facilities?
- b) Are the Co-owners and Suncor the counterparties to this potential arrangement, or are the counterparties Jericho Wind, Inc. and Suncor?
- c) Exh D-1-1 states that there will continue to be exemptions under O.Reg. 161/99 with respect to the requirement to obtain a licence to own or operate transmission facilities. Please explain the transmission licence exemptions with respect to all relevant subsections of section 4.0.2 of O.Reg. 161/99.

**Response**

[Parts (a) - (c) of this response have been filed in accordance with the Board's *Practice Direction on Confidential Filings*]

**ONTARIO ENERGY BOARD (BOARD STAFF) - INTERROGATORY #22**

**Interrogatory**

**References**

EB-2013-0041 Exh E-2-1 page 1-2

**Preamble**

Kerwood states that:

Although the Proposed Transmission Facilities will be used for the transmission of electricity generated by the Adelaide Project, by application of Ontario Regulation 161/99 under the Act, [Kerwood] will be exempt from the requirement to obtain a license to own or operate transmission facilities pursuant to Section 57( b) of the Act. This is because [Kerwood] will be a transmitter that is also a generator and the Proposed Transmission Facilities will be used to transmit electricity only for the purpose of conveying electricity to the IESO-controlled grid.

**Moreover, [Kerwood] will not charge a price for transmitting electricity on the Proposed Transmission Facilities.** [emphasis added]

**Questions / Requests**

- a) Does Kerwood plan to connect the generation of other parties to the Kerwood transmission facilities?
- b) If yes, please explain the transmission licence exemptions with respect to all relevant subsections of section 4.0.2 of O.Reg. 161/99.

**Response**

- a) No. Kerwood does not plan to connect other parties to the Kerwood transmission facilities at this time.
- b) Not applicable.

Filed: May 23, 2013  
EB-2013-0040 and EB-2013-0041  
Exhibit B  
Tab 1  
Schedule 3  
Responses to Board Staff  
Interrogatories  
Appendix A

**APPENDIX 'A'**

**IR #1(c)**



**Chimax Inc.**

**Company Profile**

**2012**

Chimax Inc.  
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- c. Industrial Buildings and Machinery

## Introduction

Established in 1989, Chimax Inc. has since grown into a highly-regarded engineering firm excelling in the design of electrical generation, transmission and distribution systems, and industrial buildings. Our dedicated staffs include a core of highly motivated and experienced professional engineers, designers and CAD operators.

Our engineering expertise, which continues to expand and grow, reflects the diverse assignments and hard work of our diligent staff over the years. Our dedicated staffs have extensive power utility experience, technical expertise and are committed to providing services of the highest calibre. Our extensive field experience working with construction contractors and keen eye for detail have allowed us to continually provide practical and cost effective solutions and recommendations for our clients.

Our reputation is built on efficient service, quality solutions and competitive fees. We pride ourselves on our practice of integrating all disciplines involved on each project. This team approach to tackling projects holds true throughout our day-to-day operations as well. We strongly believe that total co-operation among all parties involved is the key to completing projects on time and on budget. The added value to our clients is our ability to develop cost effective solutions in difficult situations or unanticipated events. This has avoided potential cost overruns in many projects for our clients.

Chimax Inc. offers a variety of engineering services including civil, structural and electrical engineering. Previous work has included the design of high voltage substations, transmission and distribution lines, switch yard design, protection and control systems, industrial buildings, overhead cranes, conveyors, mobile units for equipment transport and unique custom designs for special situations.

## Services

Engineering is a key component for completing a successful project on schedule and on budget. Typical project phases include feasibility studies, conceptual design, detail design, specifications, procurement, installation supervision, commissioning and start-up.

Chimax has successfully completed over 600 projects of various sizes with our dedicated staff and partners. In addition to our practical knowledge on various regulatory (e.g. national and provincial codes, interconnection specifications, CSA, etc.) and engineering standards (e.g. IEEE, equipment specifications, etc.), our ability to put together an effective team specific to each project give us the competitive advantage in many design projects.

Completed project assignments include:

- Feasibility study, front end engineering design
- Conceptual layout design (electrical substations, switchyards, transmission and distribution lines, interconnections, industrial buildings etc)
- Detail designs including structural analysis, plan and profile, cable sag and tension review etc.
- Specifications for foundation and structure fabrication, major material procurements
- Consulting services for project owners
- Technical supports for construction contractors
- Custom engineering design for special situations
- Project management services

Chimax Inc. staffs are highly proficient in the use of the most up to date design tools (e.g., AutoCAD, PLS-CADD, PLS-Tower, PLS-Pole, STADD-PRO etc.) to facilitate the design process and detail drawings production.

All work performed by our company are covered by professional engineering liability insurance.

## Experience

Chimax has completed well over 600 projects since inception. The key market segments served by Chimax include electrical power, oil and gas and mining industry. Our client list includes power utilities, major oil and gas, and mining companies as well as engineering, procurement and construction (EPC) contractors. These project engagements spanned across Ontario, Alberta and other provinces, as well as international locations such as Jamaica, St. Vincent, Bahamas, Iran, British Virgin Island, Belize etc. (see the sample list of reference projects). Chimax's engagements in these projects ranged from feasibility studies, general layouts, to detail engineering design of the civil structure for the distribution lines, substations or switch yards, to providing technical expertise or engineering support to the construction contractors.

The Government of Ontario initiative on renewable energy and "green" power accelerated many wind farm developments. Chimax Inc. is fortunate to be in the position to provide valuable experience and expertise to the success of many of these projects. As of the end of 2008, Chimax Inc. was involved in over 80% of the installed capacity.

## Areas of Engineering Services

### Power Station Layout and Design:

Using the client information and engineering data provided (e.g., single line diagram and available land information, layout of the equipment arrangement etc.); a typical deliverable could be a work package for construction that includes:

- Station and equipment layout,
- Detail equipment support and towers structure design,
- Detail foundations design,
- Bill of materials.

### Typical engagements:

- High voltage transformer stations designs
- Distribution substations design
- Switch yards design
- Mobile high voltage equipment station design
- Retrofit and upgrade of existing stations
- Feasibility study
- Engineering consulting services
- Project management



Substation,  
Greenfield Energy Centre

### **Transmission and Distribution Lines:**

Using the proposed routing and survey information, appropriate design tools, Chimax can assist the client:

- Determine the optimal routing/right of way,
- Engineer the interface with others, liaison with contractors, suppliers, Hydro One, IESO, AESO etc,
- Provide plan and profile drawings
- Design pole/tower structures and arrangement drawings,
- Detail foundation design,
- Line bill of material,
- Sag and tension report and string chart,
- Technical support during construction.

Typical engagements:

- High voltage transmission line design
- Distribution line or collector line design
- Interconnections to transmission grid or local distribution line
- Feasibility study
- Engineering consulting services
- Project management



**Transmission Lines  
Greenfield Energy Centre**



**Old Harbour Metering Station, Jamaica**

### **Industrial Buildings and Machinery:**

Custom design for special requirements -  
typical engagements:

- Structure design for material handling conveyer
- Trailer design for carrying equipment or other form of mobile unit
- Modification of existing structure and building
- Structure and foundation design for light industry projects

## Principals

**Kevin Wong, M.A.Sc., B.A.Sc., P.Eng.**

**President**

Mr. Wong has over 30 years of engineering and management experience in the Civil / structural / transmission line / substation design field. His experience and knowledge covers many aspects of industrial structures, heavy or light equipment foundations, stress analysis, conveyor support structures, and high voltage substation and transmission line and support structural design. Extensive experience in the application of computer aided technology for structural and foundation design analysis, transmission line and transmission line structure design and drawing production.

As the President of Chimax Inc., Mr. Wong built the company to become one of the premium engineering firms for the power industry. In the past 16 years, Chimax Inc. completed more than 600 design projects for various clients in the utilities, EPC contractors, independent power producers and mining companies. These projects include engineering design, feasibility study in high voltage substation, high voltage switch yard, transmission line, distribution line and high voltage capacitor bank station.

As the Chief Civil Engineer in Markham Electric, Mr. Wong managed and completed more than fifty projects in the power sector. These projects include high voltage substation, high voltage switch yard and transmission line design.

Mr. Wong's first nine years in the profession were spent working for Stone & Webster Canada Limited where 70% of the projects were in the power sector. These projects involved designing refinery industrial structures, and piping support structures design for nuclear stations, mainly in the U.S.

**Clive Chu, B.A.Sc., P. Eng**  
**Vice President**

Mr. Chu has over 30 years of diverse experience in the electric utility industry. In his senior management roles, he successfully managed diverse teams and stakeholders in multi-millions programs and project delivery, implemented sustainable processes and business services.

With his strong leadership skills and result driven approach, he has directed diverse groups of technical, union staff and external consultants to plan and execute business and IT programs. Mr. Chu was an active member of the industry associations (APPA, CEA and MEA) chairing various committees, hosting conferences and participating in many speaking engagements.

Some of his achievements include:

- Development and implementation of corporate business plan, strategic plan,
- Development and implementation project management process, project control office,
- Development and implementation of utility fibre optic communication services,
- Program implementation of automate distribution system control, automated mapping and facility management,
- Development and implementation of customer information system and one-stop shopping centre concept for utility customers.



**Edmund Kwong, B.A.Sc., M.A.Sc.**  
**Senior Project Manager**

Mr. Kwong has over 13 years engineering and management experience in the area of high voltage substation and transmission line, and automotive plant retrofit projects.

Mr. Kwong is responsible for the project technical deliverables that includes equipment layout design, pole structure design, transmission line plan and profile, sag & tension, specification of equipment requirement, etc. He is highly proficient in the use of specialized engineering tools such as PLS-CADD, PLS-POLE, PLS-TOWER and STADD Pro programs.

For the past 13 years, he has been heavily involved in the design of transmission line and distribution lines; providing technical advices to clients; coordinating technical requirements between the clients, owner, contractors, suppliers and power authorities such as Hydro One or local utilities. He provides practical advice and recommendations to clients and EPC contractors with his diverse field experience and intimate knowledge of regulatory requirements. Mr. Kwong has completed over three hundred design projects in high voltage substations, high voltage switch yards, transmission lines, distribution lines and high voltage capacitor bank stations.

**Walter Lee**  
**Head, Drafting and Production**  
**Senior Designer**

Mr. Lee has over 16 years of structural design experience. He started his own steel detailing business as a Structure Design Specialist between 2000 and 2006 before rejoining Chimax Inc. in 2006. He has extensive experience in technical standards and design in industrial structures, transmission lines, and high voltage substations.

As Senior Structural Designer in Chimax Inc., Mr. Lee is responsible for standards and engineering design for structural requirements, transmission lines and substation.

His roles include the management of the design drawing production and quality control, preparing the technical specifications for site construction, steel fabrication and concrete casting. Mr. Lee is highly proficient in the use of AutoCAD, PLS-CADD and PLS-POLE for modelling high voltage transmission lines, including preparing plan and profile, and structural design and detail drawings.

**Raymond Leung, B.A.Sc., M.Eng**  
**Project Manager**

Mr. Leung has over 10 years of international engineering and management experience in various civil and structural engineering projects including precast segmental vehicular viaducts, underground subway stations, marine and offshore structures, residential and industrial buildings.

With his diverse field experience and knowledge of civil engineering design, Mr. Leung is responsible for the project technical deliverables that includes foundation design and analysis, high voltage switchyard and substation design, transmission and distribution line design. He is highly proficient in the use of specialized engineering tools such as STADD Pro and various structural analysis programs.

Mr. Leung has recently joined the company and has been heavily involved in the design of high voltage substation and distribution lines; providing technical advice to clients; coordinating technical requirements between the clients, owner, contractors and power authorities such as Hydro One or local power utility companies. His recent projects include a distribution system upgrade for a local distribution utility and a transmission line substation design for power developers.

**Vicky Wu, B.Eng.**  
**Structure Designer**

Ms. Wu has over 12 years of experience in civil engineering structural design and over 5 years of experience in structural design for high voltage substations. She is highly proficient in the use of software for computer aided design and structural analysis including AutoCAD, MathCAD, STADD Pro, PLS Caisson, L-PILE and PLS-CADD.

Ms. Wu has extensive knowledge of all areas of substation design which has allowed her to contribute to many aspects of high voltage substation design including that of concrete foundations, civil site layouts and high voltage structures. She also regularly prepares technical specifications for site construction, steel fabrication, and reinforced concrete casting and prepares and revises shop drawings.

Ms. Wu has also played an active role in projects involving industrial structures, heavy and light equipment foundations, stress analysis, and conveyor support structures, in addition to high voltage substation designs.

**Appendix I: Clients**

- AECON
- Algal & Associates Ltd
- Allied Uniking Corporation Inc.
- AMEC
- Black & McDonald
- Colin Campbell High Voltage Construction Ltd.
- Eaton
- Electrical Utilities Safety Association of Ontario
- Eptcon Ltd. (Electrical Power & Transmission)
- Fluor Canada
- Futurecom
- Giffels Associates Limited
- High Voltage Construction Services Ltd.
- K-Line Construction and Maintenance Ltd.
- K-Line International Ltd.
- K-Tek Electro-services Consulting Engineers
- Lineman's Testing Laboratories
- MCW Consultants Ltd.
- NKC
- Power Stream
- Primary Power Designs Inc.
- S&C Electric
- Sithe Canadian Holding Inc.
- SNC Lavalin
- Stone & Webster Canada Limited
- Team Associates Ltd.
- The State Group Limited
- Thunder Bay Hydro
- Tiltran
- Toyota Motor Manufacturing Canada Inc.
- Transalta Energy Corporation
- Veridian Connections
- Wardrop
- Wasaga Hydro

### **Appendix II: Sample Reference Projects**

- a. Power Station Layout and Design
- b. Transmission and Distribution Lines
- c. Industrial Buildings and Machinery

### a. Power Station Layout and Design

Substation or switchyard projects typically include the design and detailing of all or some of the following: foundations, oil containment pits, site plans, site formation and grading, duct banks, switchgears, equipment layout, structural steelwork, terminal poles, bills of materials, construction details as well as the design of other associated equipment and buildings. Many of our completed projects include modifications and upgrades needed to allow existing substations to meet new regulations or operating requirements in addition to designing new substations from the ground up. Listed below are examples of substations or switchyards designed by Chimax.

#### Power Stations Layout and Design – Ontario

- **Greenfield Energy Centre** – 230kV substation and 230kV double circuit (4 km), *Courtright, Ontario*  
Station design and detail design of all required structural steelwork, foundation and grading, electrical equipment layout and bill of material.
- **St. Clair Energy Centre** – Outdoor Switchyard, *St. Clair, Ontario*  
Station design and detail design of all required structural steelwork, foundation, electrical equipment layout and bill of material.
- **Totten Mine** – 69kV/15kV Substation, *Ontario*  
Station design and detail design of all required structural steelwork, foundation, electrical equipment layout and bill of material.
- **Halton Hills** – 230kV Switchyard design, *Ontario*  
Station design and detail design of all required structural steelwork, foundation, electrical equipment layout and bill of material.
- **Gartshore** – 138 Substation, *Sault St. Marie, Ontario*
- **Atlas Specialty System N29** – 230kV Substation, *Ontario*
- **Barrie Hydro** – Penataguishene Substation, *Ontario*
- **Huron Wind Farm** – 44kV Substation, *Bruce County, Ontario*
- **Lac Des Iles Expansion Project** – 120kV Tap Point Substation, *Ontario*
- **Gerdau Courtice Steel Inc.** – 230kV Substation, *Ontario*
- **Waterloo North Hydro** – 230kV Substation, *Waterloo, Ontario*

- **Atlantic Packaging** – Whitby Cogeneration Plant - 230kV Switchyard, and Transmission Tower, *Whitby, Ontario*
- **Ontario Power Generation** – Decew Fall Generating Station, *Ontario*  
Converted substation and transmission from 44kV to 115kV

### Power Stations Layout and Design – Canada

- **Fortis B.C.** – 230kV substation, *Kettle Valley, B.C.*
- **Meadow Lake OSH Plant** – 230kV substation, *Saskatchewan*
- **Nexen Chemicals** – 115kV substation, *Brandon, Manitoba*
- **B.C. Hydro** – 500kV Guichon Capacitor Bank, *Logan Lake, British Columbia*
- **Brooklyn Energy Centre** – 138kV and 25kV Substation, *Brooklyn, Nova Scotia*
- **TransCanada Pipelines** – 240kV Switchyard and 3.5km Transmission Line, Kapuskasing, 240kV Switchyard and 2.0km Transmission Line
- **Delta Port** – 69kV Substation, *Vancouver, British Columbia*
- **Enbridge Pipelines Inc.** – SVC Yard, *Gretna, Manitoba*
- **Mamquam, B.C.** – 69kV Switchyard

### Power Stations Layout and Design – International

- **Jamaica Energy Partners** – West Kingston 69kV Substation and Transmission Line.  
Foundation and structural design for substation and transmission pole structures subject to severe seismic loading, *Jamaica*
- **Jamaica Public Service Co. Ltd.** – Wigton Wind Farm Project  
69kV substation and 69kV transmission line, *Jamaica*  
Design & detail of all required structural steel work, review of prefab control building, design of all foundations including all construction details, design of the electrical equipment layout and bill of material, underground cable layout and detail of duct bank.
- **Saltillo Plant** – 115kV – 33/19.075kV 25 MVA. Substation, *Magna, Mexico*

- **Bahamas Electricity Corporation** – New Providence Power Expansion Program, Phase II  
Six Substations (132kV & 33kV) and 50km of 33kV & 132kV Single & Double Circuit Transmission Lines, *New Providence, Bahamas*
- **Belize Electricity Limited** – Second Power Development Project  
Six 115/34.5/22kV Substations, *Belize*
- **Jamaica Public Service Co. Ltd.** – Up Park Camp - 69kV Substation, *Kingston, Jamaica*
- **Jamaica Public Service Company** – Spur Tree 138kV Substation, Parnassus 138kV Substation, Kendal 138kV Substation, *Jamaica*.
- **St. Lucia Electricity Services Limited** – Union 69kV Substation, Reduit 69kV Substation, Soufriere 69kV Substation and 8 km of 66kV Transmission Line from Reduit Station to Union Station, *St. Lucia*
- **Falconbridge** – Switch structure for #1 and #3 furnaces, *Dominica Republic*

### b. Transmission and Distribution Lines

Transmission and distribution line projects typically include the design and detailing of all or some of the following: plan and profile of transmission line route, bills of materials, caisson foundations and structures, lattice steel structures, steel poles, technical specifications for construction, etc. The following are samples of transmission and distribution line projects designed by Chimax:

- **Kruger, Port Alma Wind Farm** – 34.5kV collector line (21 km), 34.5/230kV transformer station, *Merlin, Ontario*
- **Enbridge Ontario Wind Power** – 44kV collector line (51 km) and 230kV switchyard, *Kincardine, Ontario*
- **Yukon Energy Corporation** – 138kV transmission line, Carmack to Stewart Crossing (180km), 25kV distribution line Minto Landing to Minto Mine (28 km), *Yukon*
- **Suncor, Ripley Wind Farm** – 34.5 and 69kV Collector Lines, Ripley, *Ontario*  
Transmission pole line design
- **Sithe Energies Canadian Development, Ltd.** – Goreway Switching Station and 230kV double circuit (2.3 km) transmission line, *Brampton, Ontario*
- **Erie Shore Wind Farm** – 34.5kV Collector Lines (28 km) and 34.5kV/115kV transformer station, *Port*



### *Burwell, Ontario*

- **Prince I and Price II Wind Power** – 30kV substation foundation and detail design, Prince II 34.5kV collector line (18 km), *Ontario*
- **Epcor, Kingsbridge I Wind Farm** – 27.6kV Collector / Transmission Lines (40 km) pole line design, *Goderich, Ontario*,
- **Transalta Energy Corporation** – 230kV Double Circuit Transmission line, *Sarnia, Ontario*  
Design of transmission line, equipment bill of material, caisson foundation and structures, provided technical specifications for construction.
- **ATCO Electric Limited** – 240kV Double Circuit Transmission Line Structures, *Alberta*  
Detail design of all lattices steel structures for the double circuit transmission line.
- **Newfoundland and Labrador Hydro** – TL 218/ TL 236 Upgrade Study Report, Newfoundland Study of upgrade and replacement for the existing 230kV double circuit line (approx. 10km long) with steel pole / lattice steel tower/ or modification to existing structures.
- **Barbados Light & Power Company Ltd** – 69kV Transmission Line Project  
Design of the transmission line, steel pole structures & foundations
- **CEATI , Wind and Ice Storm Mitigation Interest Group (WISMIG)** – CEA study on Post-Storm Inspection and Assessment on the Lattice Steel Tower of the Existing High Voltage Transmission Line.

### c. Industrial Buildings and Machinery

Extensive experience designing heavy duty support structures for industrial buildings and machinery.

- **TMMC / Allied Uniking** – Design of Lexus R330 door line conveyor supporting structures and platforms.
- **Falconbridge** – Kidd Creed Mine, material handling conveyer
- **Falconbridge** – Copper smelter, material handling conveyer
- **Placer Dome** – Pamour Pit Expansion, conveyer gallery
- **Inco** – Voisey Bay Nickel Plant, overhead gallery and underground conveyer structure and building
- **AT&T** – Modification to the existing antenna structures to support additional equipment.

## Appendix II: Sample Reference Projects

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- **Future Com** – Engineering new antenna installation on existing building
- **Ford Oakville** – Modification to the car plant building, structures and equipment, review and certify all drawings supplied by SSOE (U.S.A. Engineering Company).
- **ACSYS** – Modification to the failing steel coils supports and foundations for safety requirements.
- **Toyota Motor Manufacturing Canada, Inc.** – New Dock for South Assembly Plant, *Cambridge, Ontario*  
Detail design of cut and cast in place concrete, Detail design of all required structural steelwork, design of foundations including all construction details, all required civil work such as site formation, grading and paved road.
- **Honda, Alison Plant 2** – Design and modifications conveyer support platform, Ontario
- **Taiwan, Sugar Unloader Crane**  
Detail design of all structural steelwork for the sugar unloader crane including all misc. stair, and platform, etc.

Filed: May 23, 2013  
EB-2013-0040 and EB-2013-0041  
Exhibit B  
Tab 1  
Schedule 3  
Responses to Board Staff  
Interrogatories  
Appendix B

**APPENDIX 'B'**

**IR #3(d)**

**RENEWABLE ENERGY APPROVAL**NUMBER 2494-94QQ97  
Issue Date: April 26, 2013

Bornish Wind G.P Inc, as general partner for and on behalf  
of Bornish Wind L.P.  
390 Bay Street, Suite 1720  
Toronto, Ontario  
M5H 2Y2

Project Bornish Wind Energy Centre  
Location:

The Site is located south of Elginfield Road, east of Pete  
Sebe Road, north of Elmtree Drive and west of Fort Rose  
Road.  
Municipality of North Middlesex Municipality, Middlesex  
County

*You have applied in accordance with Section 47.4 of the Environmental Protection Act for approval to  
engage in a renewable energy project in respect of Class 4 Wind facility consisting of the following:*

- the construction, installation, operation, use and retiring of a 45 wind turbine facility with a total name plate  
capacity of 72.9 megawatts.

*For the purpose of this renewable energy approval, the following definitions apply:*

1. "Acoustic Assessment Report" means the report included in the Application and entitled "Noise Impact  
Assessment -Bornish Wind Energy Centre", dated April 15, 2013, prepared by GL Garrad Hassan and  
signed by A. Nercessian, S. Dokouzian, A. Brunskill and D. Eaton and "Parkhill Interconnect-Noise Impact  
Assessment", dated April 2, 2013, prepared by GL Garrad Hassan and signed by A. Nercessian, S.  
Dokouzian, N. O'Blens, M. Roberge and D.Eaton;
2. "Acoustic Audit - Emission" means an investigative procedure that is compliant with the IEC Standard  
61400-11 and consisting of measurements and/or acoustic modelling of noise emissions produced by wind  
turbine generators, assessed to determine compliance with the manufacturer's noise (acoustic) equipment  
specifications and emission data of the wind turbine generators, included in the Acoustic Assessment  
Report;

3. "Acoustic Audit - Immission" means an investigative procedure consisting of measurements and/or acoustic modelling of all sources of noise emissions due to the operation of the Equipment, assessed to determine compliance with the Noise Performance Limits set out in this Approval;
4. "Acoustic Audit Report-Emission" means a report presenting the results of the Acoustic Audit - Emission;
5. "Acoustic Audit Report- Immission" means a report presenting the results of the Acoustic Audit - Immission;
6. "Acoustic Audit - Transformer Substation" means an investigative procedure that is compliant with the IEEE Standard C57.12.90 consisting of measurements and/or acoustic modelling of all noise sources comprising the transformer substation assessed to determine compliance with the Sound Power Level specification of the transformer substation described in the Acoustic Assessment Report.
7. "Acoustic Audit Report - Transformer Substation" means a report presenting the results of the Acoustic Audit - Transformer Substation.
8. "Acoustical Consultant" means a person currently active in the field of environmental acoustics and noise/vibration control, who is knowledgeable about Ministry noise guidelines and procedures and has a combination of formal university education, training and experience necessary to assess noise emissions from wind facilities;
9. "Act" means the *Environmental Protection Act*, R.S.O 1990, c.E.19, as amended;
10. "Adverse Effect" has the same meaning as in the Act;
11. "Application" means the application for a Renewable Energy Approval dated 2012/07/23, and signed by Thomas Bird, NextEra Energy Canada and all supporting documentation submitted with the application, including amended documentation submitted up to the date this Approval is issued;
12. "Approval" means this Renewable Energy Approval issued in accordance with Section 47.4 of the Act, including any schedules to it;
13. "A-weighting" means the frequency weighting characteristic as specified in the International Electrotechnical Commission (IEC) Standard 61672, and intended to approximate the relative sensitivity of the normal human ear to different frequencies (pitches) of sound. It is denoted as "A";
14. "A-weighted Sound Pressure Level" means the Sound Pressure Level modified by application of an A-weighting network. It is measured in decibels, A-weighted, and denoted "dBA";
15. "Class 1 Area" means an area with an acoustical environment typical of a major population centre, where the background sound level is dominated by the activities of people, usually road traffic, often referred to as "urban hum";

16. "Class 2 Area" means an area with an acoustical environment that has qualities representative of both Class 1 and Class 3 Areas:
1. sound levels characteristic of Class 1 during daytime (07:00 to 19:00 or to 23:00 hours);
  2. low evening and night background sound level defined by natural environment and infrequent human activity starting as early as 19:00 hours (19:00 or 23:00 to 07:00 hours);
  3. no clearly audible sound from stationary sources other than from those under impact assessment.
17. "Class 3 Area" means a rural area with an acoustical environment that is dominated by natural sounds having little or no road traffic, such as the following:
1. a small community with less than 1000 population;
  2. agricultural area;
  3. a rural recreational area such as a cottage or a resort area; or
  4. a wilderness area.
18. "Company" means Bornish Wind G.P Inc, as general partner for and on behalf of Bornish Wind L.P, the partnership under the laws of Ontario, and includes its successors and assignees;
19. "Compliance Protocol for Wind Turbine Noise" means the Ministry document entitled, Compliance Protocol for Wind Turbine Noise, Guideline for Acoustic Assessment and Measurement, PIBS# 8540e;
20. "Decibel" means a dimensionless measure of Sound Level or Sound Pressure Level, denoted as dB;
21. "Director" means a person appointed in writing by the Minister of the Environment pursuant to section 5 of the Act as a Director for the purposes of section 47.5 of the Act;
22. "District Manager" means the District Manager of the appropriate local district office of the Ministry where the Facility is geographically located;
23. "Equipment" means the 45 wind turbine generators, one transformer substation in the Bornish location and two transformers substations in the Parkhill Interconnect location, identified in this Approval and as further described in the Application, to the extent approved by this Approval;
24. "Equivalent Sound Level" is the value of the constant sound level which would result in exposure to the same total A-weighted energy as would the specified time-varying sound, if the constant sound level persisted over an equal time interval. It is denoted  $L_{eq}$  and is measured in dB A-weighting (dBA);

25. "Facility" means the renewable energy generation facility, including the Equipment, as described in this Approval and as further described in the Application, to the extent approved by this Approval;
26. "IEC Standard 61400-11" means the International Standard IEC Standard 61400-11, Wind turbine generator systems – Part 11: Acoustic noise measurement techniques, 2006;
27. "IEEE Standard C57.12.90" means the IEEE Standard Test Code for Liquid-Immersed Distribution, Power, and Regulating Transformers, 2010.
28. "Independent Acoustical Consultant" means an Acoustical Consultant who is not representing the Company and was not involved in preparing the Acoustic Assessment Report. The Independent Acoustical Consultant shall not be retained by the Acoustical Consultant involved in the noise impact assessment;
29. "Ministry" means the ministry of the government of Ontario responsible for the Act and includes all officials, employees or other persons acting on its behalf;
30. "Noise Guidelines for Wind Farms" means the Ministry document entitled, "Noise Guidelines for Wind Farms - Interpretation for Applying MOE NPC Publications to Wind Power Generation Facilities", dated October 2008;
31. "Noise Receptor" has the same meaning as in O. Reg. 359/09;
32. "Publication NPC-103" means the Ministry Publication NPC-103 of the Model Municipal Noise Control By-Law, Final Report, August 1978, published by the Ministry as amended.
33. "Publication NPC-233" means Ministry Publication NPC-233, "Information to be Submitted for Approval of Stationary Sources of Sound", October 1995;
34. "O. Reg. 359/09" means Ontario Regulation 359/09 "Renewable Energy Approvals under Part V.0.1 of the Act" made under the Act;
35. "Point of Reception" has the same meaning as in the Noise Guidelines for Wind Farms and is subject to the same qualifications described in that document;
36. "Sound Level" means the A-weighted Sound Pressure Level;
37. "Sound Level Limit" is the limiting value described in terms of the one hour A-weighted Equivalent Sound Level  $L_{eq}$ ;
38. "Sound Power Level" means ten times the logarithm to the base of 10 of the ratio of the sound power (Watts) of a noise source to standard reference power of  $10^{-12}$  Watts;
39. "Sound Pressure" means the instantaneous difference between the actual pressure and the average or barometric pressure at a given location. The unit of measurement is the micro pascal ( $\mu\text{Pa}$ );

40. "Sound Pressure Level" means twenty times the logarithm to the base 10 of the ratio of the effective pressure ( $\mu\text{Pa}$ ) of a sound to the reference pressure of  $20 \mu\text{Pa}$ ;
41. "UTM" means Universal Transverse Mercator coordinate system.

*You are hereby notified that this approval is issued to you subject to the terms and conditions outlined below:*

## **TERMS AND CONDITIONS**

### **A - GENERAL**

- A1. The Company shall construct, install, use, operate, maintain and retire the Facility in accordance with the terms and conditions of this Approval and the Application and in accordance with the following schedules attached hereto:

Schedule A - Facility Description

Schedule B - Coordinates of the Equipment and Noise Specifications

Schedule C - Noise Control Measures

- A2. Where there is a conflict between a provision of this Approval and any document submitted by the Company, the conditions in this Approval shall take precedence. Where there is a conflict between one or more of the documents submitted by the Company, the document bearing the most recent date shall take precedence.
- A3. The Company shall ensure a copy of this Approval is:
- (1) accessible, at all times, by Company staff operating the Facility and;
  - (2) submitted to the clerk of each local municipality and upper-tier municipality in which the Facility is situated.
- A4. If the Company has a publicly accessible website, the Company shall ensure that the Approval and the Application are posted on the Company's publicly accessible website within five (5) business days of receiving this Approval.
- A5. The Company shall, at least six (6) months prior to the anticipated retirement date of the entire Facility, or part of the Facility, review its Decommissioning Plan Report to ensure that it is still accurate. If the Company determines that the Facility cannot be decommissioned in accordance with the Decommissioning Plan Report, the Company shall provide the Director and District Manager a written description of plans for the decommissioning of the Facility.
- A6. The Facility shall be retired in accordance with the Decommissioning Plan Report and any directions provided by the Director or District Manager.



- A7. The Company shall, at least six (6) months prior to the anticipated retirement date of the entire Facility, or part of the Facility, contact the ministry responsible for agriculture in Ontario at that time to discuss its plans for the decommissioning of the Facility, and follow any reasonable directions provided by that ministry in respect of the Company's plans to restore the project location to its previous agricultural capacity.
- A8. The Company shall provide the District Manager and the Director at least ten (10) days written notice of the following:
- (1) the commencement of any construction or installation activities at the project location; and
  - (2) the commencement of the operation of the Facility.
- A9. As described in Schedule A of the Approval the Company shall not construct or operate more than forty five (45) out of the forty eight (48) wind turbine generators identified in the Schedule B of the Approval;
- A10. The Company shall ensure that any necessary authorizations under the *Endangered Species Act (2007)* have been obtained prior to the commencement of construction of the Facility in areas that support habitat for endangered or threatened species.

## **B - EXPIRY OF APPROVAL**

- B1. Construction and installation of the Facility must be completed within three (3) years of the later of:
- (1) the date this Approval is issued; or
  - (2) if there is a hearing or other litigation in respect of the issuance of this Approval, the date that this hearing or litigation is disposed of, including all appeals.
- B2. This Approval ceases to apply in respect of any portion of the Facility not constructed or installed before the later of the dates identified in Condition B1.

## **C - NOISE PERFORMANCE LIMITS**

- C1. The Company shall ensure that:
- (1) the Sound Levels from the Equipment, at the Points of Reception identified in the Acoustic Assessment Report, comply with the Sound Level Limits set in the Noise Guidelines for Wind Farms, as applicable, and specifically as stated in the table below:

<b>Wind Speed (m/s) at 10 m height</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
Sound Level Limits, dBA	40.0	40.0	40.0	43.0	45.0	49.0	51.0

- (2) the Equipment is constructed and installed at either of the following locations:
  - a) at the locations identified in Schedule B of this Approval; or

b) at a location that does not vary by more than 10 metres from the locations identified in Schedule B of this Approval and provided that,

i) the Equipment will comply with Condition C1 (1); and

ii) all setback prohibitions established under O. Reg. 359/09 are complied with.

(3) the Equipment complies with the noise specifications set out in Schedule B of this Approval.

- C2. If the Company determines that some or all of the Equipment cannot be constructed in accordance with Condition C1 (2), prior to the construction and installation of the Equipment in question, the Company shall apply to the Director for an amendment to the terms and conditions of the Approval.
- C3. Within three (3) months of the completion of the construction of the Facility, the Company shall submit to the Director a written confirmation signed by an individual who has the authority to bind the Company that the UTM coordinates of the “as constructed” Equipment comply with the requirements of Condition C1 (2).
- C4. The locations identified in Appendix C, Appendix D and Table 2-2 of the Acoustic Assessment Report are specified as Noise Receptors for the purposes of subsection 54 (1.1) of O. Reg. 359/09 and subsection 35 (1.01) of O. Reg. 359/09.

#### **D - ACOUSTIC AUDIT - IMMISSION AND EMISSION (TRANSFORMER SUBSTATIONS)**

- D1. The Company shall carry out an Acoustic Audit of the three (3) transformer substations in accordance with the procedure set out in Publication NPC-103, and shall submit to the District Manager and the Director an Acoustic Audit Report prepared by an Independent Acoustical Consultant in accordance with the requirements of Publication NPC-233, no later than six (6) months after the commencement of the operation of the Facility.

#### **E - ACOUSTIC AUDIT - EMISSION (WIND TURBINES)**

- E1. The Company shall carry out an Acoustic Audit - Emission of the acoustic emissions produced by the operation of the wind turbine generators in accordance with the following:
- (1) the acoustic audit measurements shall be undertaken in accordance with the IEC Standard 61400-11;
  - (2) the acoustic emission measurements shall be performed by an Independent Acoustical Consultant; and
  - (3) the acoustic audit measurements shall be performed on two (2) of the wind turbine generators used in the Facility;

- E2. The Company shall submit to the District Manager and the Director an Acoustic Audit Report -Emission, prepared in accordance with Section 9 of the IEC Standard 61400-11 by an Independent Acoustical Consultant, no later than six (6) months after the commencement of the operation of the Facility.

#### **F - ACOUSTIC AUDIT - IMMISSION (WIND TURBINES)**

- F1. The Company shall carry out an Acoustic Audit - Immission of the Sound Levels produced by the operation of the Equipment in accordance with the following:
- (1) the acoustic audit measurements shall be undertaken in accordance with Part D of the Compliance Protocol for Wind Turbine Noise;
  - (2) the acoustic audit measurements shall be performed by an Independent Acoustical Consultant at three (3) different Points of Reception that have been selected using the following criteria:
    - a) the Points of Reception should represent the location of the greatest predicted noise impact, i.e., the highest predicted Sound Level; and
    - b) the Points of Reception should be located in the direction of prevailing winds from the Facility;
  - (3) the acoustic audit measurements shall be performed on two (2) separate occasions within a period of twelve (12) months that represent the lowest annual ambient Sound Levels, preferably:
    - a) March and April, and
    - b) October and November.
- F2. The Company shall submit to the District Manager and the Director an Acoustic Audit Report - Immission, prepared by an Independent Acoustical Consultant, at the following points in time:
- (1) no later than nine (9) months after the commencement of the operation of the Facility for the first of the two (2) acoustic audit measurements at the three (3) Points of Reception; and
  - (2) no later than fifteen (15) months after the commencement of the operation of the Facility for the second of the two (2) acoustic audit measurements at the three (3) Points of Reception.

#### **G - STORMWATER MANAGEMENT**

- G1. The Company shall employ best management practices for stormwater management and sediment and erosion control during construction, installation, use, operation, maintenance and retiring of the Facility, as described in the report included in the Application.
- G2. Within six (6) months of the completion of the construction of the Facility, the Company shall provide the District Manager with a written description of post-construction stormwater management conditions.

## **H - SEWAGE WORKS OF THE TRANSFORMER SPILL CONTAINMENT FACILITY**

H1. The Company shall design and construct a transformer substation spill containment facility which meets the following requirements:

- (1) the spill containment area serving the transformer substation shall have a minimum volume equal to the volume of transformer oil and lubricants plus the volume equivalent to providing a minimum 24-hour duration, 50-year return storm capacity for the stormwater drainage area around the transformer under normal operating conditions;
- (2) the containment facility shall have an impervious concrete floor and walls or impervious plastic liner on floor and walls, sloped toward an outlet, maintaining a freeboard of approximately 0.25 metres terminating approximately 0.30 metres above grade, and a minimum 300mm layer of crushed stoned (typical 19mm to 38mm in diameter) within, all as needed in accordance to site specific conditions and final design parameters;
- (3) the containment facility shall drain to an oil control device, such as an oil/water separator, a pump-out sump, an oil absorbing material in a canister or a blind sump; and
- (4) the oil control device shall be equipped with an oil detection system and appropriate sewage appurtenances, such as, but not limited to: sump, oil/grit separator, pumpout manhole, level controllers, floating oil sensors, etc., that allows for batch discharges or direct discharges and for proper implementation of the monitoring program described in Condition No. H4.

H2. The Company shall:

- (1) prior to the construction of the transformer substation spill containment facility, provide the District Manager and Director a report and drawings issued for construction signed and stamped by an independent Professional Engineer licensed in Ontario and competent in electrical engineering;
- (2) within six (6) months of the completion of the construction of the transformer substation spill containment facility, provide the District Manager and Director a report and drawings issued for construction signed and stamped by an independent Professional Engineer licensed in Ontario which includes the following:
  - a) as-built drawings of the sewage works;
  - b) confirmation that the transformer substation spill containment facility has been designed and installed according to appropriate specifications; and
  - c) confirmation of the adequacy of the operating procedures and the emergency procedures manuals as it pertains to the installed sewage works.
- (3) as a minimum, check the oil detection system on a monthly basis and create a written record of the inspections;

- (4) ensure that the effluent is essentially free of floating and settle-able solids and does not contain oil or any other substance in amounts sufficient to create a visible film, sheen or foam on the receiving waters;
- (5) immediately identify and clean-up all losses of oil from the transformer;
- (6) upon identification of oil in the effluent pumpout, take immediate action to prevent the further occurrence of such loss; and
- (7) ensure that equipment and material for the containment, clean-up and disposal of oil and materials contaminated with oil are kept within easy access and in good repair for immediate use in the event of:
  - a) loss of oil from the transformer,
  - b) a spill within the meaning of Part X of the Act, or
  - c) the identification of an abnormal amount of oil in the effluent.

H3. The Company shall design, construct and operate the sewage works such that the concentration of the effluent parameter named in the table below does not exceed the maximum concentration objective shown for that parameter in the effluent, and shall comply with the following requirements:

<b>Effluent Parameters</b>	<b>Maximum Concentration Objective</b>
Oil and Grease	15mg/L

- (1) notify the District Manager as soon as reasonably possible of any exceedance of the maximum concentration objective set out in the table above;
- (2) take immediate action to identify the cause of the exceedance; and
- (3) take immediate action to prevent further exceedances.

H4. Upon commencement of the operation of the Facility, the Company shall establish and carry out the following monitoring program for the sewage works:

- (1) the Company shall collect and analyze the required set of samples at the sampling points listed in the table below in accordance with the measurement frequency and sample type specified for the effluent parameter, oil and grease, and create a written record of the monitoring:

<b>Effluent Parameters</b>	<b>Measurement Frequency and Sample Points</b>
Oil and Grease	<p>B – Batch, i.e., for each discrete volume in the sewer appurtenance as per H1(4) prior to pumpout; or</p> <p>Q – Quarterly for direct effluent discharge, i.e., four times over a year, relatively evenly spaced.</p>

- (2) in the event of an exceedance of the maximum concentration objective set out in the table in Condition No. H3, the Company shall:
  - (a) increase the frequency of sampling to once per month, for each month that effluent discharge occurs, and
  - (b) provide the District Manager, on a monthly basis, with copies of the written record created for the monitoring until the District Manager provides written direction that monthly sampling and reporting is no longer required; and
- (3) if over a period of twenty-four (24) months of effluent monitoring under Condition No. H4(1), there are no exceedances of the maximum concentration set out in the table in Condition No. H3, the Company may reduce the measurement frequency of effluent monitoring to a frequency as the District Manager may specify in writing, provided that the new specified frequency is never less than annual.

H5. The Company shall comply with the following methods and protocols for any sampling, analysis and recording undertaken in accordance with Condition No. H4:

- (1) Ministry of the Environment publication "Protocol for the Sampling and Analysis of Industrial/ Municipal Wastewater", January 1999, as amended from time to time by more recently published editions, and
- (2) the publication "Standard Methods for the Examination of Water and Wastewater," 21st edition, 2005, as amended from time to time by more recently published editions.

## **I - WATER TAKING ACTIVITIES**

I1. For foundation dewatering, if the amount of discharge exceeds 50,000 litres per day:

- (1) the inlet pump head shall be surrounded with clear stone and filter fabric;
- (2) the discharge must be sampled each day that water is discharged and analyzed for total suspended solids (TSS). In the event that sampling results show that TSS in the discharge water exceeds 25 mg/L, the Company shall implement appropriate measures (settling tank or geosock or similar device) to mitigate these impacts; and,
- (3) the Company shall regulate the discharge at such a rate that there is no flooding in the receiving water body or dissipate the discharge so that no soil erosion is caused that impacts the receiving water body.

I2. For stream diversion, if the amount of discharge exceeds 50,000 litres per day and dam and pump technology is used:

- (1) the Company shall regulate the discharge at such a rate that there is no flooding in the downstream area and no soil erosion or stream channel scouring caused at the point of discharge. The Company shall use a discharge diffuser or other energy dissipation device, if necessary, to mitigate flows which physically alter the stream channel or banks; and,
  - (2) siltation control measures shall be installed at both the taking location upstream of the construction site and (if necessary) the discharge site and shall be sufficient for the volumes pumped. The Company shall take all measures to properly maintain these control devices throughout the construction period.
- I3. For water takings (by tanker) for the purposes of dust suppression, equipment washing, and similar activities:
  - (1) notwithstanding the authorized rate of water taking, this Approval limits the taking of water at any site at the project location for up to 10% of the instantaneous streamflow present on the day or days of taking. The authorized water taking rate may therefore have to be adjusted downward to remain within this 10% maximum;
  - (2) prior to taking water from any site at the project location, the Company shall contact the Ausable Bayfield Conservation Authority to determine if any low water conditions have been declared and are in effect. The Company shall not take water if a Level 2 or Level 3 low water condition has been declared; and,
  - (3) no modification to the existing stream channel by excavation or damming is permitted under this Approval.

## **J - SURFACE WATER**

- J1. The Company shall conduct the pre-construction monitoring described in Table 7 of the "Water Body Environmental Impact Study," dated July 2012, and included in the Application.
- J2. Within one year of the completion of the construction of the Facility, the Company must provide the District Manager, in writing, a description of post-construction surface water quality conditions and a written description of any additional remediation works required. The written description shall include surface water conditions during the freshet period occurrence in the first Spring following the construction of the Facility.

## **K - NATURAL HERITAGE AND PRE AND POST CONSTRUCTION MONITORING**

### **GENERAL**

- K1. The Company shall implement the Bornish Wind Energy Centre Natural Heritage Environmental Effects Monitoring Plan, dated April 2013, the commitments made in the Bornish Wind Energy Centre Natural Heritage Assessment and Environmental Impact Study, dated April 2012, the commitments made in the Natural Heritage Assessment - Addendum Report, dated July 2012, and the commitments made in the Natural Heritage Assessment - Addendum II Report, dated February 2013, prepared by Natural Resource Solutions Inc., and included in the Application, and which the Company submitted to the Ministry of Natural Resources in order to comply with O. Reg. 359/09.
- K2. If the Company determines that it must deviate from either the Environmental Effects Monitoring Plan, the Natural Heritage Assessment and Environmental Impact Study, the Natural Heritage Assessment - Addendum Report or the Natural Heritage Assessment - Addendum II Report, described in Condition K1, the Company shall contact the Ministry of Natural Resources and the Director, prior to making any changes to either of these documents, and follow any directions provided.

#### **PRE-CONSTRUCTION MONITORING – SIGNIFICANT WILDLIFE HABITAT**

- K3. The Company shall implement the pre-construction monitoring described in the Environmental Effects Monitoring Plan described in Condition K1, including the following:
- (1) A baseline survey of Amphibian Woodland Breeding for features AWO-001, AWO-002, AWO-003;
  - (2) A baseline survey of Bat Maternity Colony for features BMA-008, BMA-009, BMA-010, BMA-011, BMA-013, BMA-016, BMA-017;
  - (3) A baseline survey of Raptor Wintering Area for feature RWA-002; and
  - (4) A baseline survey of Bald Eagle Nesting Foraging and Perching for feature BAL-001.

#### **POST-CONSTRUCTION MONITORING – SIGNIFICANT WILDLIFE HABITAT**

- K4. Should the Wildlife Habitat described in Condition K3 (1), K3 (2), K3 (3) or K3 (4) be deemed significant based on the criteria in reports described in Condition K1, the Company shall implement the post-construction monitoring described in the Environmental Effects Monitoring Plan, the Natural Heritage Assessment and Environmental Impact Study, the Natural Heritage Assessment - Addendum Report and the Natural Heritage Assessment - Addendum II Report described in Condition K1, including disturbance monitoring described for the following features:
- (1) Amphibian Woodland Breeding features AWO-001, AWO-002, AWO-003;
  - (2) Bat Maternity Colony features BMA-008, BMA-009, BMA-010, BMA-011, BMA-013, BMA-016, BMA-017;
  - (3) Raptor Wintering Area feature RWA-002; or
  - (4) Bald Eagle Nesting Foraging and Perching feature BAL-001
- K5. Should the Wildlife Habitat described in Condition K3 (4) be deemed significant based on the criteria in reports described in Condition K1, the Company shall implement one of the following as described in the Environmental Effects Monitoring Plan, the Natural Heritage Assessment and Environmental Impact Study, the Natural Heritage Assessment - Addendum Report and the Natural Heritage Assessment - Addendum II Report described in Condition K1:



- (1) If the Activity Assessment confirms the nest to be active and the Behavioural Study is not conducted, the candidate Bald Eagle habitat feature BAL-001 and an 800 metre radius around the nest (see Figure 1 of the Natural Heritage Assessment Addendum II Report, dated February 2013) will be considered Significant Wildlife Habitat. In this case, the Company shall not construct Turbines 2 and 3, but shall follow the alternate project layout outlined in Appendix I of the Natural Heritage Assessment Addendum II Report, dated February 2013.
- (2) If the Activity Assessment confirms the nest to be active and the Behavioural Study is conducted, the candidate Bald Eagle habitat feature BAL-001, as defined by the refined habitat zone based on information collected during the Behavioural Study will be considered Significant Wildlife Habitat. In this case, if Turbines 2 and 3 will not be located within this refined habitat, the Company may construct Turbines 2 and 3 and apply the appropriate construction and operational mitigation outlined in Table 4 of the Natural Heritage Assessment Addendum II Report, dated February 2013.
- (3) If the candidate Bald Eagle habitat feature BAL-001 is deemed not to be significant based on the results of the Activity Assessment, the Company may construct Turbines 2 and 3 and no mitigation or post construction monitoring (avoidance/disturbance) is required.

## **POST CONSTRUCTION MONITORING - BIRD AND BAT MORTALITY MONITORING**

- K6. The Company shall implement the post-construction bird and bat mortality monitoring described in the Environmental Effects Monitoring Plan described in Condition K1 at a minimum of 14 of the 45 constructed wind turbines, selected in consultation with the Ministry of Natural Resources. In addition,
- (1) should the Wildlife Habitat described in Condition K3 (3) be deemed significant based on the criteria in reports described in Condition K1, the Company shall extend post construction raptor mortality monitoring as described in the Environmental Effects Monitoring Plan described in Condition K1 to include December 1 through March 31 at all wind turbines within 120m of the habitat.
  - (2) should the Wildlife Habitat described in Condition K3 (4) be deemed and Condition K5(1) or K5(2) be implemented, the Company shall extend post construction mortality monitoring, specifically for the bald eagle, as described in the Environmental Effects Monitoring Plan described in Condition K1 to include February 15 through April 30 at all wind turbines within 120m of the habitat.

## **THRESHOLDS AND MITIGATION**

- K7. The Company shall contact the Ministry of Natural Resources and the Director if any of the following bird and bat mortality thresholds, as stated in the Natural Heritage Environmental Effects Monitoring Plan for the Bornish Wind Energy Centre described in Condition K1, are reached or exceeded:
- (1) 10 bats per turbine per year across the wind power project;
  - (2) 14 birds per turbine per year at individual turbines or turbine groups;

- (3) 0.2 raptors per turbine per year (all raptors) across the wind power project;
- (4) 0.1 raptors per turbine per year (provincially tracked raptors) across the wind power project;
- (5) 10 or more birds at any one turbine during a single monitoring survey; or
- (6) 33 or more birds (including raptors) during a single monitoring survey across the wind power project.

K8. If the bat mortality threshold described in Condition K7 (1) is reached or exceeded, the Company shall:

- (1) implement operational mitigation measures consistent with those described in the Ministry of Natural Resources publication entitled "Bats and Bat Habitats: Guidelines for Wind Power Projects" dated July 2011, or in an amended version of the publication, including:
  - a) increase cut-in speed to 5.5 m/s or feather wind turbine blades when wind speeds are below 5.5 m/s between sunset and sunrise, from July 15 to September 30 at all turbines, for the operating life of the Facility. Should site specific monitoring indicate a shifted peak mortality period, operational mitigation may be shifted to match the peak mortality, with mitigation maintained for a minimum of 10 weeks. Any shift in the operational mitigation period to match peak mortality should be determined in coordination with and confirmed by Ministry of Natural Resources; and
- (2) implement an additional three (3) years of effectiveness monitoring.

K9. If the bat mortality threshold described in Condition K7 (1) is reached or exceeded after operational mitigation is implemented in accordance with Condition K8, the Company shall prepare and implement a contingency plan, in consultation with the Ministry of Natural Resources, to address mitigation actions which shall include additional mitigation and scoped monitoring requirements.

K10. If either of the bird mortality thresholds described in Conditions K7 (2), K7 (3) or K7 (4) is reached or exceeded for turbines located within 120m of bird significant wildlife habitat, or if disturbance effects are realized at bird significant wildlife habitat within 120m of turbine(s) while monitoring is being implemented in accordance with Condition K4, the Company shall implement immediate mitigation actions as described in the Environmental Effects Monitoring Plan, the Natural Heritage Assessment and Environmental Impact Study, the Natural Heritage Assessment - Addendum Report and the Natural Heritage Assessment - Addendum II Report described in Condition K1, and an additional three (3) years of effectiveness monitoring.

K11. If either of the bird mortality thresholds described in Conditions K7 (2), K7 (3) or K7 (4) is reached or exceeded for turbines located outside 120 metres of bird significant wildlife habitat, the Company shall conduct two (2) years of subsequent scoped mortality monitoring and cause and effects monitoring. Following the completion of scoped monitoring, the Company shall implement operational mitigation and effectiveness monitoring at individual turbines as agreed to between the Company and the Ministry of Natural Resources, for the first three (3) years following the implementation of mitigation.

K12. If either of the bird mortality thresholds described in Conditions K7 (5) or K7 (6) is reached or exceeded, the Company shall prepare and implement a contingency plan to address immediate mitigation actions which shall include:

- (1) periodic shut-down of select turbines;
- (2) blade feathering at specific times of year; or
- (3) an alternate plan agreed to between the Company and the Ministry of Natural Resources.

K13. If either of the bird mortality thresholds described in Conditions K7 (2), K7 (3) or K7 (4) is reached or exceeded while monitoring is being implemented in accordance with Condition K10, or if either of the bird mortality thresholds described in Conditions K7 (5) or K7 (6) is reached or exceeded after mitigation is implemented in accordance with Condition K12, the Company shall contact the Ministry of Natural Resources and prepare and implement an appropriate response plan that shall include some or all of the following mitigation measures:

- (1) increased reporting frequency to identify potential threshold exceedance;
- (2) additional behavioural studies to determine factors affecting mortality rates;
- (3) periodic shut-down of select turbines;
- (4) blade feathering at specific times of year; or
- (5) an alternate plan agreed to between the Company and the Ministry of Natural Resources.

## **REPORTING AND REVIEW OF RESULTS**

K14. The Company shall report, in writing, the results of the post-construction disturbance monitoring described in Condition K4, to the Ministry of Natural Resources for three (3) years on an annual basis and within three (3) months of the end of each calendar year in which the monitoring took place.

K15. The Company shall report, in writing, bird and bat mortality levels to the Ministry of Natural Resources for three (3) years on an annual basis and within three (3) months of the conclusion of the November mortality monitoring, with the exception of the following:

- (1) if the bat mortality threshold described in Condition K7 (1) is reached or exceeded, the Company shall report mortality levels to the Ministry of Natural Resources for the additional three (3) years of monitoring described in Condition K8, on an annual basis and within three (3) months of the conclusion of the October mortality monitoring for each year;
- (2) if either of the bird mortality thresholds described in Conditions K7 (5) or K7 (6) is reached or exceeded, the Company shall report the mortality event to the Ministry of Natural Resources within 48 hours of observation;
- (3) if either of the bird mortality thresholds described in Conditions K7 (2), K7 (3) or K7 (4) is reached or exceeded for turbines located within 120m of bird significant wildlife habitat, the Company shall report mortality levels to the Ministry of Natural Resources for the additional three (3) years of effectiveness monitoring described in Condition K10, on an annual basis and within (3) months of the conclusion of the November mortality monitoring for each year;

- (4) if either of the bird mortality thresholds described in Conditions K7 (2), K7 (3) or K7 (4) is reached or exceeded for turbines located outside 120 metres of bird significant wildlife habitat, the Company shall report mortality levels to the Ministry of Natural Resources for the additional two (2) years of cause and effects monitoring described in Condition K11, on an annual basis and within three (3) months of the conclusion of the November mortality monitoring for each year;
- (5) should the Wildlife Habitat described in Condition K3 (3) be deemed significant based on the criteria in reports described in Condition K1, the Company shall report mortality levels to the Ministry of Natural Resources on an annual basis and within one (1) month of the conclusion of the May 1 to March 31 monitoring period as stated in the Natural Heritage Environmental Effects Monitoring Plan for the Bornish Wind Energy Centre described in Condition K1; any deviation in reporting will be determined in consultation with MNR.

## **L - TRAFFIC MANAGEMENT PLANNING**

- L1. Within three (3) months of receiving this Approval, the Company shall prepare a Traffic Management Plan and provide it to the Municipality of North Middlesex and to Middlesex County.
- L2. Within three (3) months of having provided the Traffic Management Plan to Municipality of North Middlesex and to Middlesex County, the Company shall make reasonable efforts to enter into a Road Users Agreement with the Municipality of North Middlesex and Middlesex County.
- L3. If a Road Users Agreement has not been signed with the Municipality of North Middlesex and Middlesex County within three (3) months of having provided the Traffic Management Plan to the Municipality of North Middlesex and to Middlesex County, the Company shall provide a written explanation to the Director as to why this has not occurred.

## **M - ARCHAEOLOGICAL RESOURCES**

- M1. The Company shall implement all of the recommendations, if any, for further archaeological fieldwork and for the protection of archaeological sites found in the consultant archaeologist's report included in the Application, and which the Company submitted to the Ministry of Tourism, Culture and Sport in order to comply with O. Reg. 359/09.
- M2. Should any previously undocumented archaeological resources be discovered, the Company shall:
  - (1) cease all alteration of the area in which the resources were discovered immediately;
  - (2) engage a consultant archaeologist to carry out the archaeological fieldwork necessary to further assess the area and to either protect and avoid or excavate any sites in the area in accordance with the *Ontario Heritage Act*, the regulations under that act and the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists*; and
  - (3) notify the Director as soon as reasonably possible.

## **N - COMMUNITY LIAISON COMMITTEE**

- N1. Within three (3) months of receiving this Approval, the Company shall make reasonable efforts to establish a Community Liaison Committee. The Community Liaison Committee shall be a forum to exchange ideas and share concerns with interested residents and members of the public. The Community Liaison Committee shall be established by:
- (1) publishing a notice in a newspaper with general circulation in each local municipality in which the project location is situated; and
  - (2) posting a notice on the Company's publicly accessible website, if the Company has a website; to notify members of the public about the proposal for a Community Liaison Committee and invite residents living within a one (1) kilometer radius of the Facility that may have an interest in the Facility to participate on the Community Liaison Committee.
- N2. The Company may invite other members of stakeholders to participate in the Community Liaison Committee, including, but not limited to, local municipalities, local conservation authorities, Aboriginal communities, federal or provincial agencies, and local community groups.
- N3. The Community Liaison Committee shall consist of at least one Company representative who shall attend all meetings.
- N4. The purpose of the Community Liaison Committee shall be to:
- (1) act as a liaison facilitating two way communications between the Company and members of the public with respect to issues relating to the construction, installation, use, operation, maintenance and retirement of the Facility;
  - (2) provide a forum for the Company to provide regular updates on, and to discuss issues or concerns relating to, the construction, installation, use, operation, maintenance and retirement of the Facility with members of the public; and
  - (3) ensure that any issues or concerns resulting from the construction, installation, use, operation, maintenance and retirement of the Facility are discussed and communicated to the Company.
- N5. The Community Liaison Committee shall be deemed to be established on the day the Director is provided with written notice from the Company that representative Community Liaison Committee members have been chosen and a date for a first Community Liaison Committee meeting has been set.
- N6. If a Community Liaison Committee has not been established within three (3) months of receiving this Approval, the Company shall provide a written explanation to the Director as to why this has not occurred.

- N7. The Company shall ensure that the Community Liaison Committee operates for a minimum period of two (2) years from the day it is established. During this two (2) year period, the Company shall ensure that the Community Liaison Committee meets a minimum of two (2) times per year. At the end of this two (2) year period, the Company shall contact the Director to discuss the continued operation of the Community Liaison Committee.
- N8. The Company shall ensure that all Community Liaison Committee meetings are open to the general public.
- N9. The Company shall provide administrative support for the Community Liaison Committee including, at a minimum:
- (1) providing a meeting space for Community Liaison Committee meetings;
  - (2) providing access to resources, such as a photocopier, stationery, and office supplies, so that the Community Liaison Committee can:
    - a) prepare and distribute meeting notices;
    - b) record and distribute minutes of each meeting; and
    - c) prepare reports about the Community Liaison Committee's activities.
- N10. The Company shall submit any reports of the Community Liaison Committee to the Director and post it on the Company's publicly accessible website, if the Company has a website.

## **O - OPERATION AND MAINTENANCE**

- O1. Prior to the commencement of the operation of the Facility, the Company shall prepare a written manual for use by Company staff outlining the operating procedures and a maintenance program for the Equipment that includes as a minimum the following:
- (1) routine operating and maintenance procedures in accordance with good engineering practices and as recommended by the Equipment suppliers;
  - (2) emergency procedures;
  - (3) procedures for any record keeping activities relating to operation and maintenance of the Equipment; and
  - (4) all appropriate measures to minimize noise emissions from the Equipment.
- O2. The Company shall;
- (1) update, as required, the manual described in Condition O1; and

- (2) make the manual described in Condition O1 available for review by the Ministry upon request.
- O3. The Company shall ensure that the Facility is operated and maintained in accordance with the Approval and the manual described in Condition O1.

**P - RECORD CREATION AND RETENTION**

- P1. The Company shall create written records consisting of the following:
  - (1) an operations log summarizing the operation and maintenance activities of the Facility;
  - (2) within the operations log, a summary of routine and Ministry inspections of the Facility; and
  - (3) a record of any complaint alleging an Adverse Effect caused by the construction, installation, use, operation, maintenance or retirement of the Facility.
- P2. A record described under Condition P1 (3) shall include:
  - (1) a description of the complaint that includes as a minimum the following:
    - a) the date and time the complaint was made;
    - b) the name, address and contact information of the person who submitted the complaint;
  - (2) a description of each incident to which the complaint relates that includes as a minimum the following:
    - a) the date and time of each incident;
    - b) the duration of each incident;
    - c) the wind speed and wind direction at the time of each incident;
    - d) the ID of the Equipment involved in each incident and its output at the time of each incident;
    - e) the location of the person who submitted the complaint at the time of each incident; and
  - (3) a description of the measures taken to address the cause of each incident to which the complaint relates and to prevent a similar occurrence in the future.
- P3. The Company shall retain, for a minimum of five (5) years from the date of their creation, all records described in Condition P1, and make these records available for review by the Ministry upon request.

**Q - NOTIFICATION OF COMPLAINTS**

- Q1. The Company shall notify the District Manager of each complaint within two (2) business days of the receipt of the complaint.
- Q2. The Company shall provide the District Manager with the written records created under Condition P2 within eight (8) business days of the receipt of the complaint.

## **R - CHANGE OF OWNERSHIP**

- R1. The Company shall notify the Director in writing, and forward a copy of the notification to the District Manager, within thirty (30) days of the occurrence of any of the following changes:
- (1) the ownership of the Facility;
  - (2) the operator of the Facility;
  - (3) the address of the Company;
  - (4) the partners, where the Company is or at any time becomes a partnership and a copy of the most recent declaration filed under the *Business Names Act*, R.S.O. 1990, c.B.17, as amended, shall be included in the notification; and
  - (5) the name of the corporation where the Company is or at any time becomes a corporation, other than a municipal corporation, and a copy of the most current information filed under the *Corporations Information Act*, R.S.O. 1990, c. C.39, as amended, shall be included in the notification.

## **S – ABORIGINAL CONSULTATION**

- S1. During the construction, installation, operation, use and retiring of the Facility, the Company shall:
- (1) create and maintain written records of any communications with Aboriginal communities; and
  - (2) make the written records available for review by the Ministry upon request.
- S2. The Company shall provide the following to interested Aboriginal communities:
- (1) updated project information, including the results of monitoring activities undertaken and copies of additional archaeological assessment reports that may be prepared; and;
  - (2) updates on key steps in the construction, installation, operation, use and retirement phases of the Facility, including notice of the commencement of construction activities at the project location.
- S3. If an Aboriginal community requests a meeting to obtain information relating to the construction, installation, operation, use and retiring of the Facility, the Company shall make reasonable efforts to arrange and participate in such a meeting.
- S4. If any archaeological resources of Aboriginal origin are found during the construction of the Facility, the Company shall:
- (1) notify any Aboriginal community considered likely to be interested or which has expressed an interest in such finds; and,



- (2) if a meeting is requested by an Aboriginal community to discuss the archaeological find(s), make reasonable efforts to arrange and participate in such a meeting.

## **SCHEDULE A**

### **Facility Description**

The Facility shall consist of the construction, installation, operation, use and retiring of the following:

#### **Bornish wind farm:**

- (a) a total of forty five (45) out of forty eight (48) wind turbine generators each rated at a maximum of 1.62 megawatts (MW) generating output capacity with a maximum total name plate capacity of 72.9 megawatts (MW), designated as source ID Nos. 1 through 48, each with a hub height of eighty (80) metres above grade, and sited at the locations shown in Schedule B, in accordance with Condition C1(2)(b); and
- (b) associated ancillary equipment, systems and technologies including one (1) 85 mega-volt-ampere (MVA) transformer substation, on-site access roads, underground cabling and overhead transmission lines,

#### **Parkhill interconnect:**

- (c) associated ancillary equipment, systems and technologies including one (2) 225 mega-volt-ampere (MVA) transformer substation, on-site access roads, underground cabling and overhead transmission lines,

all in accordance with the Application.

## **SCHEDULE B: Coordinates of the Equipment and Noise Specifications**

Coordinates of the Equipment are listed below in UTM, Z17-NAD83 projection

### **Bornish wind farm and Parkhill interconnect substation**

Table B1: Coordinates and Maximum Sound Power Levels of Wind Turbine Generators and Transformer Substations

<b>Source ID</b>	<b>Maximum Sound Power Level (dBA)</b>	<b>Easting (m)</b>	<b>Northing (m)</b>	<b>Source description</b>
<b>1</b>	103.0	440,000	4,776,435	1.62 MW turbine, See Table B2
<b>2</b>	103.0	440,302	4,775,915	1.62 MW turbine, See Table B2
<b>3</b>	103.0	441,679	4,775,810	1.62 MW turbine, See Table B2
<b>4</b>	103.0	442,726	4,775,763	1.62 MW turbine, See Table B2
<b>5</b>	103.0	442,888	4,775,342	1.62 MW turbine, See Table B2
<b>6</b>	103.0	443,298	4,775,136	1.62 MW turbine, See Table B2
<b>7</b>	103.0	443,646	4,774,902	1.62 MW turbine, See Table B2
<b>8</b>	103.0	444,147	4,774,906	1.62 MW turbine, See Table B2
<b>9</b>	103.0	444,848	4,775,090	1.62 MW turbine, See Table B2
<b>10</b>	103.0	446,083	4,774,524	1.62 MW turbine, See Table B2
<b>11</b>	103.0	447,155	4,774,304	1.62 MW turbine, See Table B2
<b>12</b>	103.0	438,297	4,774,740	1.62 MW turbine, See Table B2
<b>13</b>	103.0	438,935	4,774,435	1.62 MW turbine, See Table B2
<b>14</b>	103.0	439,343	4,774,461	1.62 MW turbine, See Table B2
<b>15</b>	103.0	439,811	4,774,541	1.62 MW turbine, See Table B2
<b>16</b>	103.0	440,057	4,774,307	1.62 MW turbine, See Table B2
<b>17</b>	103.0	440,771	4,774,498	1.62 MW turbine, See Table B2
<b>18</b>	103.0	442,262	4,773,605	1.62 MW turbine, See Table B2
<b>19</b>	103.0	442,807	4,773,502	1.62 MW turbine, See Table B2
<b>20</b>	103.0	443,243	4,773,422	1.62 MW turbine, See Table B2
<b>21</b>	103.0	443,709	4,773,598	1.62 MW turbine, See Table B2
<b>22</b>	103.0	443,882	4,773,285	1.62 MW turbine, See Table B2
<b>23</b>	103.0	445,877	4,772,947	1.62 MW turbine, See Table B2
<b>24</b>	103.0	446,958	4,772,850	1.62 MW turbine, See Table B2
<b>25</b>	103.0	447,480	4,772,818	1.62 MW turbine, See Table B2
<b>26</b>	103.0	447,771	4,772,644	1.62 MW turbine, See Table B2
<b>27</b>	103.0	448,192	4,772,544	1.62 MW turbine, See Table B2
<b>28</b>	103.0	438,099	4,773,385	1.62 MW turbine, See Table B2
<b>29</b>	103.0	438,407	4,773,226	1.62 MW turbine, See Table B2
<b>30</b>	103.0	438,971	4,773,061	1.62 MW turbine, See Table B2
<b>31</b>	103.0	439,437	4,772,972	1.62 MW turbine, See Table B2
<b>32</b>	103.0	439,760	4,772,893	1.62 MW turbine, See Table B2
<b>33</b>	103.0	440,119	4,772,886	1.62 MW turbine, See Table B2
<b>34</b>	103.0	439,808	4,772,479	1.62 MW turbine, See Table B2
<b>35</b>	103.0	440,509	4,772,411	1.62 MW turbine, See Table B2

Table B1: Coordinates and Maximum Sound Power Levels of Wind Turbine Generators and Transformer Substations (continued)

Source ID	Maximum Sound Power Level (dBA)	Easting (m)	Northing (m)	Source description
36	103.0	442,023	4,772,350	1.62 MW turbine, See Table B2
37	103.0	442,348	4,772,325	1.62 MW turbine, See Table B2
38	103.0	442,633	4,772,221	1.62 MW turbine, See Table B2
39	103.0	442,186	4,771,810	1.62 MW turbine, See Table B2
40	103.0	442,888	4,771,912	1.62 MW turbine, See Table B2
41	103.0	443,189	4,771,699	1.62 MW turbine, See Table B2
42	103.0	443,389	4,772,239	1.62 MW turbine, See Table B2
43	103.0	443,706	4,771,937	1.62 MW turbine, See Table B2
44	103.0	445,507	4,770,915	1.62 MW turbine, See Table B2
45	103.0	446,168	4,771,350	1.62 MW turbine, See Table B2
46	103.0	437,898	4,772,729	1.62 MW turbine, See Table B2
47	103.0	443,792	4,771,485	1.62 MW turbine, See Table B2
48	103.0	438,655	4,774,608	1.62 MW turbine, See Table B2
Substation	102.8	441,434	4,775,841	85 MVA transformer, See Table B3
Parkhill T1	105.8	452,735	4,774,658	225 MVA transformer, See Table B4
Parkhill T2	105.8	452,777	4,774,648	225 MVA transformer, See Table B4

Note: The Maximum Sound Power Level of the transformer substations include the applicable 5 dB adjustment for tonality as prescribed in Publication NPC-104.

Table B2: Maximum Sound Power Level spectrum (dBA) of the 1.62 MW Wind Turbine Generators

1-48	Octave Band Centre Frequency (Hz)							
	63	125	250	500	1000	2000	4000	8000
Sound Power Level (dBA)	84	91.7	95.5	97.0	97.8	95.1	87.9	69.1

Table B3: Maximum Sound Power Level spectrum (dBA) of the 85 MVA Transformer Substation including 5dB tonality adjustment

Substation	Octave Band Centre Frequency (Hz)							
	63	125	250	500	1000	2000	4000	8000
Sound Power Level (dBA)	79.2	91.3	93.8	99.2	96.4	92.6	87.4	78.3

Table B4: Maximum Sound Power Level spectrum (dBA) of the 225 MVA Transformer Substation including 5dB tonality adjustment

Parkhill T1 Parkhill T2	Octave Band Centre Frequency (Hz)							
	63	125	250	500	1000	2000	4000	8000
Sound Power Level (dBA)	82.2	94.3	96.8	102.2	99.4	95.6	90.4	81.3

**SCHEDULE C**  
**Noise Control Measures**

**Acoustic Barrier - Parkhill Interconnect Substation:**

Two (2) 28 metres long and 5.5 metres high acoustic barriers, positioned as per Figure entitled "Noise Map" of the Acoustic Assessment Report. The acoustic barriers shall be continuous without holes, gaps and other penetrations, and having a surface mass at least 20 kilograms per square metres.

*The reasons for the imposition of these terms and conditions are as follows:*

## **REASONS**

1. Conditions A1, A2 and A9 are included to ensure that the Facility is constructed, installed, used, operated, maintained and retired in the manner in which it was described for review and upon which Approval was granted. These conditions are also included to emphasize the precedence of conditions in the Approval and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review.
2. Conditions A3 and A4 are included to require the Company to provide information to the public and the local municipality.
3. Conditions A5, A6 and A7 are included to ensure that final retirement of the Facility is completed in an aesthetically pleasing manner, in accordance with Ministry standards, and to ensure long-term protection of the health and safety of the public and the environment.
4. Condition A8 is included to require the Company to inform the Ministry of the commencement of activities related to the construction, installation and operation of the Facility.
5. Condition A10 is included to ensure all necessary authorizations under the *Endangered Species Act (2007)* are obtained.
5. Condition B is intended to limit the time period of the Approval.
6. Condition C1 is included to provide the minimum performance requirement considered necessary to prevent an Adverse Effect resulting from the operation of the Equipment and to ensure that the noise emissions from the Equipment will be in compliance with applicable limits set in the Noise Guidelines for Wind Farms.
7. Conditions A8, C2 and C3 are included to ensure that the Equipment is constructed, installed, used, operated, maintained and retired in a way that meets the regulatory setback prohibitions set out in O. Reg. 359/09.
8. Conditions D, E and F are included to require the Company to gather accurate information so that the environmental noise impact and subsequent compliance with the Act, O. Reg. 359/09, the Noise Guidelines for Wind Farms and this Approval can be verified.
9. Condition G, H, I, J, K, and L are included to ensure that the Facility is constructed, installed, used, operated, maintained and retired in a way that does not result in an Adverse Effect or hazard to the natural environment or any persons.
10. Condition M is included to protect archaeological resources that may be found at the project location.

11. Condition N is included to ensure continued communication between the Company and the local residents.
12. Condition O is included to emphasize that the Equipment must be maintained and operated according to a procedure that will result in compliance with the Act, O. Reg. 359/09 and this Approval.
13. Condition P is included to require the Company to keep records and provide information to the Ministry so that compliance with the Act, O. Reg. 359/09 and this Approval can be verified.
14. Condition Q is included to ensure that any complaints regarding the construction, installation, use, operation, maintenance or retirement of the Facility are responded to in a timely and efficient manner.
15. Condition R is included to ensure that the Facility is operated under the corporate name which appears on the application form submitted for this Approval.
16. Condition S is included to require the Company to ensure continued communication between the Company and Aboriginal communities.

## NOTICE REGARDING HEARINGS

*In accordance with Section 139 of the Environmental Protection Act, within 15 days after the service of this notice, you may by further written notice served upon the Director, the Environmental Review Tribunal and the Environmental Commissioner, require a hearing by the Tribunal.*

*In accordance with Section 47 of the Environmental Bill of Rights, 1993, the Environmental Commissioner will place notice of your request for a hearing on the Environmental Registry.*

*Section 142 of the Environmental Protection Act provides that the notice requiring the hearing shall state:*

1. The portions of the renewable energy approval or each term or condition in the renewable energy approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

*The signed and dated notice requiring the hearing should also include:*

3. The name of the appellant;
4. The address of the appellant;
5. The renewable energy approval number;
6. The date of the renewable energy approval;
7. The name of the Director;
8. The municipality or municipalities within which the project is to be engaged in;

*This notice must be served upon:*

The Secretary\*

The Environmental Commissioner

The Director

Environmental Review Tribunal  
655 Bay Street, 15th Floor  
Toronto, Ontario  
M5G 1E5

AND

1075 Bay Street, 6th Floor  
Suite 605  
Toronto, Ontario  
M5S 2B1

AND

Section 47.5, *Environmental Protection Act*  
Ministry of the Environment  
2 St. Clair Avenue West, Floor 12A  
Toronto, Ontario  
M4V 1L5

**\* Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 314-4600, Fax: (416) 314-4506 or [www.ert.gov.on.ca](http://www.ert.gov.on.ca)**

*Under Section 142.1 of the Environmental Protection Act, residents of Ontario may require a hearing by the Environmental Review Tribunal within 15 days after the day on which notice of this decision is published in the Environmental Registry. By accessing the Environmental Registry at [www.ebr.gov.on.ca](http://www.ebr.gov.on.ca), you can determine when this period ends.*

*Approval for the above noted renewable energy project is issued to you under Section 47.5 of the Environmental Protection Act subject to the terms and conditions outlined above.*

DATED AT TORONTO this 26th day of April, 2013



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Vic Schroter, P.Eng.  
Director  
Section 47.5, *Environmental Protection Act*

MZ/

c: District Manager, MOE London - District  
Thomas Bird, NextEra Energy Canada



Filed: May 23, 2013  
EB-2013-0040 and EB-2013-0041  
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Appendix C

**APPENDIX 'C'**

**IR #9**

### **Appendix ‘C’ in Support of Response to Board Staff IR #9**

In the following table, where the status of the Applicants’ property rights acquisition efforts is marked with an “\*”, this indicates that the property, although adjacent to the ROW, is on the opposite side of the ROW from the currently planned transmission line location, in which case it is particularly unlikely that such land rights would be relied upon. The Applicants looked at both sides of the ROW in their land rights acquisition process. Where no agreement was offered in respect of a particular property, a project information package was nevertheless provided to the relevant landowner.

<b>PIN</b>	<b>Legal Description</b>	<b>Easement Type</b>	<b>Easement Size</b>	<b>Status</b>
09630-0018	Lot 9, Con 16 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50’ x length of property along ROW	In Negotiations
09638-0038	Lot 8, Con 16 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50’ x length of property along ROW	Accepted Offer
09633-0060	Lot 11, Con 17 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50’ x length of property along ROW	In Negotiations
09633-0062	Lot 9 and 10, Con 17 West of Centre Road, Municipality of North Middlesex	-	-	No Offer Made*
09633-0063	Lot 9, Con 17 West of Centre Road, Municipality of North Middlesex	-	-	No Offer Made*
09638-0036	Lot 6 and 7, Con 16 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50’ x length of property along ROW	Accepted Offer
09638-0037	Lot 7, Con 16 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50’ x length of property along ROW	Declined Offer
09633-0064	Lot 7 and 8, Con 17 West of Centre Road, Municipality of North Middlesex	-	-	No Offer Made*
09633-0081	Lot 7 and 8, Con 17 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50’ x length of property along ROW	In Negotiations
09633-0065	Lot 7, Con 17 West of Centre Road, Municipality of North Middlesex	-	-	No Offer Made*
09633-0066	Lot 7, Con 17 West of Centre Road, Municipality of North Middlesex	-	-	No Offer Made*

<b>PIN</b>	<b>Legal Description</b>	<b>Easement Type</b>	<b>Easement Size</b>	<b>Status</b>
09638-0035	Lot 5, Con 16 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Declined Offer
09638-0030	Lot 6, Con 17 West of Centre Road, Municipality of North Middlesex	-	-	No Offer Made*
09638-0053	Lot Road Allowance between the South half of Lots 5 & 6, Con 17 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	In Negotiations
09638-0034	Lot 3 and 4, Con 16 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Declined Offer
09638-0028	Lot 4 and 5, Con 17 West of Centre Road, Municipality of North Middlesex	-	-	No Offer Made*
09638-0029	Lot 5, Con 17 West of Centre Road, Municipality of North Middlesex	-	-	No Offer Made*
09638-0003	Lot 18, Con West side of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Declined Offer
09638-0027	Lot 3, Con 17 West of Centre Road, Municipality of North Middlesex	-	-	No Offer Made*
09638-0004	Lot 19, Con West side of Centre Road, Municipality of North Middlesex	-	-	No Offer Made*
09643-0045	Lot 17 and 18, Con East side of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Declined Offer
09644-0058	Lot 19, Con East side of Centre Road, Municipality of North Middlesex	-	-	No Offer Made*
09644-0043	Lot 3, Con 17 East of Centre Road, Municipality of North Middlesex	-	-	No Offer Made*
09643-0044	Lot 17 and 18, Con East side of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Declined Offer
09644-0044	Lot 3, Con 17 East of Centre Road, Municipality of North Middlesex	-	-	No Offer Made*
09643-0003	Lot 3, Con 16 East of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer

<b>PIN</b>	<b>Legal Description</b>	<b>Easement Type</b>	<b>Easement Size</b>	<b>Status</b>
09644-0045	Lot 4, Con 17 East of Centre Road, Municipality of North Middlesex	-	-	No Offer Made*
09644-0047	Lot 4, Con 17 East of Centre Road, Municipality of North Middlesex	-	-	No Offer Made*
09644-0046	Lot 4, Con 17 East of Centre Road, Municipality of North Middlesex	-	-	No Offer Made*
09643-0004	Lot 3 and 4, Con 16 East of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer
09644-0048	Lot 5, Con 17 East of Centre Road, Municipality of North Middlesex	-	-	No Offer Made*
09643-0005	Lot 4, Con 16 East of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Declined Offer
09644-0049	Lot 6, Con 17 East of Centre Road, Municipality of North Middlesex	-	-	No Offer Made*
09644-0050	Lot 7 and 8, Con 17 East of Centre Road, Municipality of North Middlesex	-	-	No Offer Made*
09643-0006	Lot 5, Con 16 East of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer
09643-0007	Lot 6, Con 16 East of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer
09643-0008	Lot 7, Con 16 East of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer
09644-0051	Lot 9, Con 17 East of Centre Road, Municipality of North Middlesex	-	-	No Offer Made*
09643-0009	Lot 8, Con 16 East of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer
09644-0052	Lot 9 and 10, Con 17 East of Centre Road, Municipality of North Middlesex	-	-	No Offer Made*
09645-0042	Lot 11, Con 17 East of Centre Road, Municipality of North Middlesex	-	-	No Offer Made*
09645-0041	Lot 11, Con 17 East of Centre Road, Municipality of North Middlesex	-	-	No Offer Made*

<b>PIN</b>	<b>Legal Description</b>	<b>Easement Type</b>	<b>Easement Size</b>	<b>Status</b>
09646-0001	Lot 9, Con 16 East of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	In Negotiations
09646-0002	Lot 9, Con 16 East of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer
09645-0043	Lot 12 and 13, Con 17 East of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer
09646-0003	Lot 10, Con 16 East of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer*
09645-0044	Lot 13, Con 17 East of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer
09645-0045	Lot 14, Con 17 East of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer*
09646-0004	Lot 11, Con 16 East of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	In Negotiations
09646-0005	Lot 12, Con 16 East of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer
09645-0046	Lot 15, Con 17 East of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Declined Offer
09646-0006	Lot 13, Con 16 East of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer
09648-0007	Lot 15, Con 6 East of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer
09645-0080	Lot 16, Con 17 East of Centre Road, Municipality of North Middlesex	-	-	No Offer Made*
09645-0079	Lot 16, Con 17 East of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	In Negotiations
09645-0081	Lot 17, Con 17 East of Centre Road, Municipality of North Middlesex	-	-	No Offer Made*
09648-0008	Lot 15, Con 6 East of Centre Road, Municipality of North Middlesex	-	-	No Offer Made

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EB-2013-0040 and EB-2013-0041  
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Appendix D

**APPENDIX 'D'**

**IR #15**

### **Appendix ‘D’ in Support of Response to Board Staff IR #15**

In the following table, where the status of the Applicants’ property rights acquisition efforts is marked with an “\*”, this indicates that the property although adjacent to the ROW is on the opposite side of the ROW from the currently planned transmission line location, in which case it is particularly unlikely that such land rights would be relied upon. The Applicants looked at both sides of the ROW in their land rights acquisition process.

<b>PIN</b>	<b>Legal Description</b>	<b>Easement Type</b>	<b>Easement Size</b>	<b>Status</b>
09625-0002	Lot 7, Con 3 North of Road, TWP of Adelaide-Metcalfe	Transmission Easement	50’ x length of property along ROW	In Negotiations*
09626-0041	Lot 6, Con 3 North of Road, TWP of Adelaide-Metcalfe	Transmission Easement	50’ x length of property along ROW	Declined Offer
09625-0025	Lot 7, Con 4 North of Road, TWP of Adelaide-Metcalfe	Transmission Easement	50’ x length of property along ROW	In Negotiations*
09625-0024	Lot 7, Con 4 North of Road, TWP of Adelaide-Metcalfe	Transmission Easement	50’ x length of property along ROW	Declined Offer*
09625-0023	Lot 7, Con 4 North of Road, TWP of Adelaide-Metcalfe	Transmission Easement	50’ x length of property along ROW	Declined Offer*
09625-0022	Lot 7, Con 4 North of Road, TWP of Adelaide-Metcalfe	Transmission Easement	50’ x length of property along ROW	Declined Offer*
09626-0025	Lot 6, Con 4 North of Road, TWP of Adelaide-Metcalfe	Transmission Easement	50’ x length of property along ROW	Declined Offer
09626-0024	Lot 6, Con 4 North of Road, TWP of Adelaide-Metcalfe	Transmission Easement	50’ x length of property along ROW	Declined Offer
09625-0021	Lot 7, Con 4 North of Road, TWP of Adelaide-Metcalfe	Transmission Easement	50’ x length of property along ROW	Declined Offer
09625-0044	Lot 7, Con 5 North of Road, TWP of Adelaide-Metcalfe	Transmission Easement	50’ x length of property along ROW	Declined Offer
09626-0001	Lot 6, Con 5 of North of Road, TWP of Adelaide-Metcalfe	Transmission Easement	50’ x length of property along ROW	Declined Offer*
09625-0043	Lot 7, Con 5 North of Road, TWP of Adelaide-Metcalfe	Transmission Easement	50’ x length of property along	Declined Offer*

<b>PIN</b>	<b>Legal Description</b>	<b>Easement Type</b>	<b>Easement Size</b>	<b>Status</b>
			ROW	
09625-0042	Lot 7, Con 5 North of Road, TWP of Adelaide-Metcalf	Transmission Easement	50' x length of property along ROW	Declined Offer*
09625-0049	Lot 7, Con 5 North of Road, TWP of Adelaide-Metcalf	Transmission Easement	50' x length of property along ROW	Declined Offer
09625-0072	Lot 7, Con 5 North of Road, TWP of Adelaide-Metcalf	Transmission Easement	50' x length of property along ROW	Declined Offer
09640-0004	Lot 10, Con 7 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Declined Offer*
09627-0002	Lot 11 & 12, Con 7 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Declined Offer
09627-0001	Lot 11, Con 7 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Declined Offer*
09640-0005	Lot 10, Con 7 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Declined Offer
09640-0029	Lot 9 & 10, Con 8 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Declined Offer
09640-0028	Lot 10, Con 8 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Declined Offer
09640-0030	Lot 9 & 10, Con 8 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Declined Offer
09640-0032	Lot 9 & 10, Con 8 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Declined Offer
09627-0038	Lot 11, Con 8 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Declined Offer*
09640-0031	Lot 10, Con 8 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer
09627-0036	Lot 11, Con 8 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer*



<b>PIN</b>	<b>Legal Description</b>	<b>Easement Type</b>	<b>Easement Size</b>	<b>Status</b>
09629-0058	Lot 12, Con 9 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	In Negotiations*
09629-0056	Lot 11, Con 9 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Declined Offer*
09640-0052	Lot 10, Con 9 West of Centre Road and 10 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer
09629-0066	Lot 11, Con 10 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer*
09629-0064	Lot 11, Con 10 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	In Negotiations*
09629-0042	Lot 11, Con 10 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer*
09629-0067	Lot 11, Con 10 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer*
09629-0063	Lot 11, Con 10 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	In Negotiations*
09629-0068	Lot 11, Con 10 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer*
09629-0043	Lot 11, Con 10 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer*
09639-0024	Lot 10, Con 11 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer
09639-0023	Lot 10, Con 11 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer
09629-0025	Lot 11, Con 11 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer*
09639-0032	Lot 8, Con 12 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer

<b>PIN</b>	<b>Legal Description</b>	<b>Easement Type</b>	<b>Easement Size</b>	<b>Status</b>
09629-0010	Lot 9, Con 12 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer
09639-0039	Lot 8, Con 13 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer*
09639-0045	Lot 8, Con 13 West of Centre Road and 14 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer*
09630-0043	Lot 9, Con 13 West of Centre Road and 14 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer
09638-0045	Lot 8, Con 15 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Declined Offer*
09630-0028	Lot 9 & 10, Con 15 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer
09638-0038	Lot 8, Con 16 West of Centre Road, Municipality of North Middlesex	Transmission Easement	50' x length of property along ROW	Accepted Offer*

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Appendix E

**APPENDIX 'E'**

**IR #19(b)**

**[This document has been filed in accordance with  
the Board's Practice Direction on Confidential Filings]**