

## **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 Location:

**Bornish Wind Energy Centre** 

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 <u>Environmental Protection Act</u> 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'Blenes, 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<sub>cq</sub> 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<sup>-12</sup> 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 (μPa);

- 40. "Sound Pressure Level" means twenty times the logarithm to the base 10 of the ratio of the effective pressure ( $\mu$ Pa) of a sound to the reference pressure of 20  $\mu$ 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:

Wind Speed (m/s) at 10 m height	4	5	6	7	8	9	10
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;
  - 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:

Effluent Parameters	Maximum Concentration Objective
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:

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

- 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
- 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;
  - 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;
  - 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 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

Source ID	Maximum Sound Power Level (dBA)	Easting (m)	Northing (m)	Source description
1	103.0	440,000	4,776,435	1.62 MW turbine, See Table B2
2	103.0	440,302	4,775,915	1.62 MW turbine, See Table B2
3	103.0	441,679	4,775,810	1.62 MW turbine, See Table B2
4	103.0	442,726	4,775,763	1.62 MW turbine, See Table B2
5	103.0	442,888	4,775,342	1.62 MW turbine, See Table B2
6	103.0	443,298	4,775,136	1.62 MW turbine, See Table B2
7	103.0	443,646	4,774,902	1.62 MW turbine, See Table B2
8	103.0	444,147	4,774,906	1.62 MW turbine, See Table B2
9	103.0	444,848	4,775,090	1.62 MW turbine, See Table B2
10	103.0	446,083	4,774,524	1.62 MW turbine, See Table B2
11	103.0	447,155	4,774,304	1.62 MW turbine, See Table B2
12	103.0	438,297	4,774,740	1.62 MW turbine, See Table B2
13	103.0	438,935	4,774,435	1.62 MW turbine, See Table B2
14	103.0	439,343	4,774,461	1.62 MW turbine, See Table B2
15	103.0	439,811	4,774,541	1.62 MW turbine, See Table B2
16	103.0	440,057	4,774,307	1.62 MW turbine, See Table B2
17	103.0	440,771	4,774,498	1.62 MW turbine, See Table B2
18	103.0	442,262	4,773,605	1.62 MW turbine, See Table B2
19	103.0	442,807	4,773,502	1.62 MW turbine, See Table B2
20	103.0	443,243	4,773,422	1.62 MW turbine, See Table B2
21	103.0	443,709	4,773,598	1.62 MW turbine, See Table B2
22	103.0	443,882	4,773,285	1.62 MW turbine, See Table B2
23	103.0	445,877	4,772,947	1.62 MW turbine, See Table B2
24	103.0	446,958	4,772,850	1.62 MW turbine, See Table B2
25	103.0	447,480	4,772,818	1.62 MW turbine, See Table B2
26	103.0	447,771	4,772,644	1.62 MW turbine, See Table B2
27	103.0	448,192	4,772,544	1.62 MW turbine, See Table B2
28	103.0	438,099	4,773,385	1.62 MW turbine, See Table B2
29	103.0	438,407	4,773,226	1.62 MW turbine, See Table B2
30	103.0	438,971	4,773,061	1.62 MW turbine, See Table B2
31	103.0	439,437	4,772,972	1.62 MW turbine, See Table B2
32	103.0	439,760	4,772,893	1.62 MW turbine, See Table B2
33	103.0	440,119	4,772,886	1.62 MW turbine, See Table B2
34	103.0	439,808	4,772,479	1.62 MW turbine, See Table B2
35	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	Easting (m)	Northing (m)	Source description
	Power Level (dBA)			
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)							
1-40	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)								
Substation	63	125	250	500	1000	2000	4000	8000		
Sound Power Level (dB.	A) 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	Octave Band Centre Frequency (Hz)							
Parkhill T2	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 <u>Environmental Protection Act</u>, 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 <u>Environmental Bill of Rights</u>, 1993, the Environmental Commissioner will place notice of your request for a hearing on the Environmental Registry.

Section 142 of the <u>Environmental Protection Act</u> 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 1075 Bay Street, 6th Floor Suite 605 AND 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

Under Section 142.1 of the <u>Environmental Protection Act</u>, 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, 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

Vic Schroter, P.Eng.

Director

Section 47.5, Environmental Protection Act

MZ/

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