

Ministry of the Environment Ministère de l'Environnement

RENEWABLE ENERGY APPROVAL

NUMBER 3259-98EQ3G Issue Date: July 23, 2013

K2 Wind Ontario Inc. operating as a general partner of and on behalf of K2 Wind Ontario Limited Partnership. 100 Simcoe St, No. 105 Toronto, Ontario M5H 3G2

ProjectK2 Wind Power ProjectLocation:Various LocationsAshfield-Colborne-Wawanosh Township, County of Huron

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 a Class 4 wind facility consisting of the following:

- the construction, installation, operation, use and retiring of a Class 4 wind facility with a total name plate capacity of 270 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 *K2 Wind Power Project, Noise Assessment Report, Revision 5 For K2 Wind Ontario*, dated January 3, 2013, prepared by Zephyr North Ltd and signed by Paul Wendelgass; Director Business Development.
- "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 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 November 13, 2012 and signed by Sarah Palmer, Senior Environmental Advisor, on behalf of K2 Wind Ontario Inc., 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 K2 Wind Ontario Inc., and includes its successors and assignees as general partner of and on behalf of K2 Wind Ontario Limited Partnership, an Ontario limited partnership, 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 one hundred and forty (140) wind turbine generators and two (2) transformer substations, 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_{en} 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. "IEEE Standard C57.12.90" means the IEEE Standard Test Code for Liquid-Immersed Distribution, Power, and Regulating Transformers, 2010.
- 27. "IEC Standard 61400-11" means the International Standard IEC Standard 61400-11, Wind turbine generator systems Part 11: Acoustic noise measurement techniques, 2006;

- 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;
- "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-233" means Ministry Publication NPC-233, "Information to be Submitted for Approval of Stationary Sources of Sound", October 1995;
- 33. "O. Reg. 359/09" means Ontario Regulation 359/09 "Renewable Energy Approvals under Part V.0.1 of the Act" made under the Act;
- 34. "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;
- 35. "Sound Level" means the A-weighted Sound Pressure Level;
- 36. "Sound Level Limit" is the limiting value described in terms of the one hour A-weighted Equivalent Sound Level L_{eo};
- 37. "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;
- "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);
- 39. "Sound Pressure Level" means twenty times the logarithm to the base 10 of the ratio of the effective pressure (μ Pa) of a sound to the reference pressure of 20 μ Pa;
- 40. "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

- 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 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.

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).

D – CONFIRMATION OF VACANT LOT NOISE RECEPTORS

D1. The locations identified in Appendix A of the Acoustic Assessment Report ,{Vacant Lot Surrogate Receptors}, 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".

E - ACOUSTIC AUDIT - IMMISSION

- E1. 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; subject to the authorization of the landowner to access the location.
 - b) the Points of Reception should be located in the direction of prevailing winds from the Facility; and
 - c) a Point of Reception in the vicinity of the Point of Reception identified as V 1617 in the Acoustic Assessment Report.
 - (3) the acoustic audit measurements shall be performed on two (2) separate occasions within a period of twelve (12) months, during months that represent the lowest annual ambient Sound Levels, preferably:
 - a) March and April, and
 - b) October and November.
- E2. The Company shall submit to the District Manager and the Director an Acoustic Audit Report-Immision, prepared by an Independent Acoustical Consultant, at the following points in time:
 - (1) no later than eighteen (18) 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 twenty-four (24) 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.

E3. The Company shall carry out an Acoustic Audit - Transformer Substation in the vicinity of the Points of Reception identified as V 1621 and R 882 in the Acoustic Assessment Report, and shall submit to the District Manager and the Director an Acoustic Audit Report – Transformer Substation prepared by an Independent Acoustical Consultant, in accordance with the IEEE Standard C57.12.90 and Ministry Publication NPC-233 and no later than six (6) months after the commencement of the operation of the Facility.

F - ACOUSTIC AUDIT- EMISSION

- F1. 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 emission 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 emission measurements shall be performed on one (1) of each of the six (6) types of wind turbines used in the Facility.

Specifically one (1) wind turbine generator rated at ;

- 1. 2.300 megawatts generating output capacity,
- 2. 2.221 megawatts generating output capacity,
- 3. 2.126 megawatts generating output capacity,
- 4. 2.030 megawatts generating output capacity,
- 5. 1.903 megawatts generating output capacity, and
- 6. 1.824 megawatts generating output capacity
- F2. 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 eighteen (18) months after the commencement of the operation of the Facility.

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. The Company shall not construct the Stormwater Management Dry-Pond or allow its commencement, until detailed drawings, specifications and an engineer's report containing detailed design calculations for the Stormwater Management Dry-Pond have been submitted and approved by the Director.

H - WATER TAKING ACTIVITIES

- H1. The water taking shall be in accordance with Appendix B of the Application, Hydrogeological Assessment in Support of Renewable Energy Approval Application for Short-term, Non-recurring Water Taking, prepared by Stantec Consulting Ltd. and dated November 2012.
 - (1) The total dewatering volume shall not exceed 400,000 litres in any given day;
 - (2) Notwithstanding Condition (1), the amount of ground water withdrawn shall not exceed that which is necessary to lower the water table in the area of construction to the approximate levels proposed in the application. All efforts shall be taken to design and conduct operations in a manner that minimizes unnecessary withdrawal of water.
 - (3) A record of all water takings shall be maintained and kept at or near the site of the taking. This record shall include the dates of water takings, and the total measured amounts of water pumped per day for each day that water is taken during the construction.
 - (4) A door-to-door survey shall be completed to identify all wells within 500 m of this water taking prior to the commencement of dewatering an excess of 50,00 litre of water per day. Water level shall be measured and recorded in selected wells at least two days prior to the commencement of dewatering. Measurements shall continue at a frequency of once per day until several days after the termination of the dewatering.
 - (5) If the taking of water is observed to cause any negative impact to other existing water supplies, actions should be taken to make available to those affected, a supply of water equivalent in quantity and quality to their normal takings, or shall compensate such persons for their reasonable costs of so doing, or shall reduce the rate and amount of taking to prevent or alleviate the observed negative impact. If permanent interference is caused by the water taking, actions shall be taken to restore the water supplies of those permanently affected.
 - (6) The discharge of water shall be carried out in manners as specified in the application, and to ensure there is no flooding, soil erosion or sedimentation that impacts the receiving water body.

I - SEWAGE WORKS OF THE TRANSFORMER SPILL CONTAINMENT FACILITY

- 11. 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 (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 I4.
- I2. 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.
- I3. 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.
- I4. 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 Parameters	Measurement Frequency and Sample Points	Sample Type
Oil and Grease	B – Batch, i.e., for each discrete volume in the sewer	Grab
	appurtenance as per I1(4) prior to pumpout; or	
	Q – Quarterly for direct effluent discharge, i.e., four	
	times over a year, relatively evenly spaced.	

- (2) in the event of an exceedance of the maximum concentration objective set out in the table in Condition I3, 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 I4 (1), there are no exceedances of the maximum concentration set out in the table in Condition I3, 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.
- I5. The Company shall comply with the following methods and protocols for any sampling, analysis and recording undertaken in accordance with Condition I4:
 - (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.

J - NATURAL HERITAGE AND PRE AND POST CONSTRUCTION MONITORING

GENERAL

- J1. The Company shall implement the *Natural Heritage Assessment and Environmental Impact Study for the K2 Wind Power Project*, dated May 2012, and the commitments made in the following reports 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:
 - Addendum to Natural Heritage Assessment and Environmental Impact Study, dated June 2012 (46 pp), prepared by Stantec;
 - Addendum 2 to the Natural Heritage Assessment and Environmental Impact Study, dated August 2012 (6pp), prepared by Stantec;
 - Addendum 3 to the Natural Heritage Assessment and Environmental Impact Study, dated October 2012 (4pp), prepared by Stantec;
 - Addendum 4 to the Natural Heritage Assessment and Environmental Impact Study, dated October 2012 (5 pp.), prepared by Stantec;
- J2. If the Company determines that it must deviate from the Environmental Impact Study or Addenda thereto, described in Condition J1, the Company shall contact the Ministry of Natural Resources and the Director, prior to making any changes to the Environmental Impact Study or Addenda, and follow any directions provided.

PRE-CONSTRUCTION MONITORING – SIGNIFICANT WILDLIFE HABITAT

- J3. The Company shall implement the pre-construction monitoring described in the Environmental Impact Study described in Condition J1, including the following:
 - (1) A baseline survey of Colonial Nesting Bird (Heron) Habitat (associated with feature 63).
 - (2) A baseline survey of Waterfowl Nesting Habitat (associated with feature 44).

- (3) A baseline survey of Bat Maternity Colony Roost Habitat (associated with features 5, 13, 28, 32, 33, 39 and 48).
- (4) A baseline survey of Winter Raptor Feeding and Roosting Habitat (associated with features 16 and 59).
- (5) A baseline survey of Amphibian Breeding Habitat (Woodland) (associated with features 12, 13, 24, 33, 35, 37 and 39).
- (6) A baseline survey of Amphibian Movement Corridors (associated with features 12, 13, 24, 33, 35, 37 and 39).

POST-CONSTRUCTION MONITORING – SIGNIFICANT WILDLIFE HABITAT

- J4. Based on the results of the pre-construction monitoring described in Condition J3, should any of the Wildlife Habitats described in Condition J3 be deemed significant, the Company shall implement the post-construction monitoring described in the Environmental Impact Study described in Condition J1, at the specific habitats that are found to be significant, including the following:
 - (1) Disturbance Monitoring for Colonial Nesting Bird (Heron) Habitat (associated with feature 63).
 - (2) Disturbance Monitoring for Waterfowl Nesting Habitat (associated with feature 44).
 - (3) Disturbance Monitoring for Bat Maternity Colony Roost Habitat (associated with features 5, 13, 28, 32, 33, 39 and 48).
 - (4) Disturbance Monitoring for Winter Raptor Feeding and Roosting Habitat (associated with features 16 and 59).
 - (5) Disturbance Monitoring for Amphibian Breeding Habitat (Woodland) (associated with features 12, 13, 24, 33, 35, 37 and 39).
 - (6) Disturbance Monitoring for Amphibian Movement Corridors (associated with features 12, 13, 24, 33, 35, 37 and 39).

POST CONSTRUCTION MONITORING - BIRD AND BAT MONITORING

J5. The Company shall implement the post-construction bird and bat mortality monitoring described in the Environmental Effects Monitoring Plan (Appendix I of the Natural Heritage Assessment and Environmental Impact Study), described in Condition J1, at a minimum of 43 of 140 constructed turbines. The turbines will be selected in consultation with Ministry of Natural Resources prior to initiating post-construction monitoring.

THRESHOLDS AND MITIGATION

- J6. 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 *Environmental Effects Monitoring Plan* (Appendix I of the *Natural Heritage Assessment and Environmental Impact Study*) described in Condition J1, exceeds:
 - (1) 10 bats per turbine per year across the Facility;
 - (2) 14 birds per turbine per year at individual turbines across the Facility;
 - (3) 0.2 raptors per turbine per year (all raptors) across the Facility;
 - (4) 0.1 raptors per turbine per year (provincially tracked raptors) across the Facility;
 - (5) 10 or more birds at any one turbine during a single monitoring survey; or
 - (6) 33 or more birds (including raptors) across the Facility during a single monitoring survey.
- J7. If the bat mortality threshold described in Condition J6 (1) is 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. Such measures shall include some or all of the following:
 - (i) increasing cut-in speed to 5.5 m/s and/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 or a select number of turbines as deemed appropriate by the Ministry of Natural Resources; or
 - (ii) implement an alternate plan agreed to between the Company and the Ministry of Natural Resources.
 - (2) implement an additional three (3) years of effectiveness monitoring.
- J8. If the bat mortality threshold described in Condition J6 (1) is exceeded after operational mitigation is implemented in accordance with Condition J7, 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.
- J9. If either of the bird mortality thresholds described in Conditions J6 (2), J6 (3) or J6 (4) is exceeded for turbines located within 120 metres of bird significant wildlife habitat, or if disturbance effects are realized at bird significant wildlife habitat within 120 metres of turbine(s) while monitoring is being implemented in accordance with Condition J5, the Company shall implement immediate mitigation actions as described in the Environmental Impact Study and Environmental Effects Monitoring Plan described in Condition J1, and an additional three (3) years of effectiveness monitoring.

- J10. If either of the bird mortality thresholds described in Conditions J6 (2), J6 (3) or J6 (4) is 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.
- J11. If either of the bird mortality thresholds described in Conditions J6 (5) or J6 (6) is 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; or
 - (2) blade feathering at specific times of year; or
 - (3) an alternate plan agreed to between the Company and the Ministry of Natural Resources.
- J12. If either of the bird mortality thresholds described in Conditions J6 (2), J6 (3) or J6 (4) is exceeded while monitoring is being implemented in accordance with Conditions J9 or J10, or if either of the bird mortality thresholds described in Conditions J6 (5) or J6 (6) is exceeded after mitigation is implemented in accordance with Condition J11, 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

- J13. The Company shall report, in writing, the results of the post-construction disturbance monitoring described in Condition J4, 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.
- J14. 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 either of the bird mortality thresholds described in Conditions J6 (5) or J6 (6) is exceeded, the Company shall report the mortality event to the Ministry of Natural Resources within 48 hours of observation;
- (2) for any and all mortality of species at risk (including a species listed on the Species at Risk in Ontario list as Extirpated, Endangered or Threatened under the provincial *Endangered Species Act, 2007*) that occurs, the Company shall report the mortality to the Ministry of Natural Resources within the later of 24 hours of observation or the next business day;
- (3) if the bat mortality threshold described in Condition J6 (1) is exceeded, the Company shall report mortality levels to the Ministry of Natural Resources for the additional three (3) years of monitoring described in Condition J7, on an annual basis and within three (3) months of the conclusion of the October mortality monitoring for each year;
- (4) if either of the bird mortality thresholds described in Conditions J6 (2), J6 (3) or J6 (4) is exceeded for turbines located within 120 m 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 J9, on an annual basis and within three (3) months of the conclusion of the November mortality monitoring for each year;
- (5) if either of the bird mortality thresholds described in Conditions J6 (2), J6 (3) or J6 (4) is exceeded for turbines located outside 120 m 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 J11, on an annual basis and within three (3) months of the conclusion of the November mortality monitoring for each year; and
- (6) if the Company implements operational mitigation following cause and effects monitoring in accordance with Condition J11, the Company shall report mortality levels to the Ministry of Natural Resources for the three (3) years of subsequent effectiveness monitoring described in Condition J11, on an annual basis and within three (3) months of the conclusion of the November mortality monitoring for each year.

ADDITIONAL POST-CONSTRUCTION REQUIREMENTS

J15. To compensate for the loss of significant woodlands as identified in the Environmental Impact Study, described in Condition J1, the Company will replace trees removed with tree species native to the ecoregion in an alternative location that is equal to the area to be cleared, with the total area to be confirmed through a post-construction site inspection conducted by the Company. Tree planting and management may be conducted in partnership with a local organization.

K - ENDANGERED SPECIES ACT REQUIREMENTS

K1. No construction or installation activities shall be commenced in areas that support habitat for Bobolink until the Company has received any required authorizations under the *Endangered Species Act*, 2007

L - ARCHAEOLOGICAL RESOURCES

- L1. 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.
- L2. 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.

M - COMMUNITY LIAISON COMMITTEE

- M1. 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.

- M2. 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.
- M3. The Community Liaison Committee shall consist of at least one Company representative who shall attend all meetings.
- M4. 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.
- M5. 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.
- M6. 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.
- M7. 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.
- M8. The Company shall ensure that all Community Liaison Committee meetings are open to the general public.
- M9. 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.
- M10. 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.

N - OPERATION AND MAINTENANCE

N1. 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.
- N2. The Company shall;
 - (1) update, as required, the manual described in Condition N1; and
 - (2) make the manual described in Condition N1 available for review by the Ministry upon request.
- N3. The Company shall ensure that the Facility is operated and maintained in accordance with the Approval and the manual described in Condition N1.

O - RECORD CREATION AND RETENTION

- O1. 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.
- O2. A record described under Condition O1 (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.
- O3. The Company shall retain, for a minimum of five (5) years from the date of their creation, all records described in Condition O1, and make these records available for review by the Ministry upon request.

P - NOTIFICATION OF COMPLAINTS

- P1. The Company shall notify the District Manager of each complaint within two (2) business days of the receipt of the complaint.
- P2. The Company shall provide the District Manager with the written records created under Condition O2 within eight (8) business days of the receipt of the complaint.

Q - CHANGE OF OWNERSHIP

- Q1. 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.

R – ABORIGINAL CONSULTATION

- R1. 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.
- R2. The Company shall provide the following to interested Aboriginal communities:
 - (1) updated non-confidential 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.
- R3. If an Aboriginal community requests a meeting to obtain non-confidential 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.
- R4. 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:

- (a) a total of 140 wind turbine generators with an output capacity of 270 megawatts as specified in the Acoustic Assessment Report;
- (b) the 140 wind turbine generators are composed of:
 - four (4) wind turbine generators rated a at 2.300 megawatts generating output capacity with a total name plate capacity of up to approximately 9.20 megawatts, each with a hub height of 99.5 metres above grade, and identified and sited as shown in Schedule B;
 - two (2) wind turbine generators rated a at 2.221 megawatts generating output capacity with a total name plate capacity of up to approximately 4.44 megawatts, each with a hub height of 99.5 metres above grade, and identified and sited as shown in Schedule B;
 - five (5) wind turbine generators rated a at 2.126 megawatts generating output capacity with a total name plate capacity of up to approximately 10.63 megawatts, each with a hub height of 99.5 metres above grade, and identified and sited as shown in Schedule B;
 - fourteen (14) wind turbine generators rated a at 2.030 megawatts generating output capacity with a total name plate capacity of up to approximately 28.42 megawatts, each with a hub height of 99.5 metres above grade, and identified and sited as shown in Schedule B;
 - ninety-five (95) wind turbine generators rated a at 1.903 megawatts generating output capacity with a total name plate capacity of up to approximately 180.79 megawatts, each with a hub height of 99.5 metres above grade, and identified and sited as shown in Schedule B;
 - twenty (20) wind turbine generators rated a at 1.824 megawatts generating output capacity with a total name plate capacity of up to approximately 36.48 megawatts, each with a hub height of 99.5 metres above grade, and identified and sited as shown in Schedule B;
- (c) two (2) transformer substations {a total of three (3) transformers} with each transformer rated no greater than 175MVA and sited at the location shown in Schedule B; and
- (d) associated ancillary equipment, systems and technologies including on-site access roads, underground and above ground collector cabling and underground transmission cabling.

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:

	Source ID	Maximum Sound Power Level (dBA)	Easting (m)	Northing (m)	Wind Turbine Maximum Electrical Power Rating (MW)
1	T200	102.0	450,069	4,851,493	1.903
2	T201	103.0	450,229	4,851,903	2.030
3	T202	102.0	449,443	4,852,755	1.903
4	T204	102.0	449,101	4,853,160	1.903
5	T205	102.0	449,406	4,853,172	1.903
6	T206	103.0	449,199	4,853,517	2.030
7	T207	106.0	445,595	4,853,991	2.300
8	T208	102.0	449,193	4,855,164	1.903
9	T209	102.0	448,796	4,855,199	1.903
10	T210	103.0	448,212	4,862,930	2.030
11	T211	101.0	448,141	4,866,122	1.824
12	T212	102.0	448,318	4,855,502	1.903
13	T213	102.0	449,347	4,855,577	1.903
14	T214	102.0	447,699	4,853,050	1.903
15	T215	102.0	447,982	4,855,855	1.903
16	T216	102.0	448,629	4,856,016	1.903
17	T217	102.0	448,267	4,856,000	1.903
18	T218	102.0	449,596	4,856,514	1.903
19	T219	106.0	446,527	4,856,681	2.300
20	T221	102.0	449,592	4,857,740	1.903

		Maximum Sound Power	Easting	Northing	Wind Turbine Maximum
	Source ID	Level (dBA)	(m)	(m)	Electrical Power Rating (MW)
21	T223	102.0	449,643	4,858,049	1.903
22	T225	102.0	450,599	4,858,895	1.903
23	T226	104.0	450,331	4,859,151	2.126
24	T227	101.0	450,035	4,859,261	1.824
25	T228	102.0	449,697	4,859,327	1.903
26	T229	103.0	448,407	4,861,873	2.030
27	T230	101.0	450,822	4,860,486	1.824
28	T231	103.0	451,718	4,861,031	2.030
29	T232	102.0	452,040	4,861,032	1.903
30	T233	102.0	449,009	4,861,401	1.903
31	T235	102.0	451,953	4,861,469	1.903
32	T236	102.0	449,375	4,861,731	1.903
33	T237	102.0	448,697	4,861,743	1.903
34	T238	105.0	448,206	4,862,179	2.221
35	T239	102.0	449,078	4,861,851	1.903
36	T240	101.0	453,690	4,866,821	1.824
37	T245	102.0	452,350	4,862,765	1.903
38	T246	101.0	452,644	4,862,507	1.824
39	T247	104.0	452,896	4,862,922	2.126
40	T248	101.0	452,124	4,863,008	1.824
41	T249	103.0	452,664	4,863,125	2.030
42	T251	101.0	448,106	4,863,267	1.824
43	T252	101.0	448,017	4,865,555	1.824
44	T253	102.0	453,103	4,863,497	1.903
45	T254	101.0	448,390	4,863,624	1.824

		Maximum Sound Power	Easting	Northing	Wind Turbine Maximum
	Source ID	Level (dBA)	(m)	(m)	Electrical Power Rating (MW)
46	T256	102.0	449,977	4,864,166	1.903
47	T257	102.0	444,818	4,864,314	1.903
48	T259	103.0	449,882	4,864,644	2.030
49	T260	102.0	445,492	4,864,730	1.903
50	T261	102.0	454,832	4,864,741	1.903
51	T262	102.0	448,826	4,864,993	1.903
52	T263	104.0	444,486	4,865,005	2.126
53	T264	102.0	444,907	4,865,047	1.903
54	T265	101.0	445,555	4,865,078	1.824
55	T266	102.0	445,229	4,865,118	1.903
56	T267	102.0	450,262	4,865,124	1.903
57	T269	102.0	449,207	4,865,217	1.903
58	T270	102.0	444,808	4,865,389	1.903
59	T271	101.0	448,470	4,865,410	1.824
60	T272	102.0	444,346	4,865,785	1.903
61	T273	102.0	454,770	4,864,340	1.903
62	T274	102.0	454,124	4,865,896	1.903
63	T275	102.0	447,782	4,865,249	1.903
64	T276	101.0	454,401	4,866,273	1.824
65	T277	102.0	453,573	4,866,245	1.903
66	T279	102.0	448,361	4,866,429	1.903
67	T280	102.0	446,291	4,866,337	1.903
68	T281	102.0	451,953	4,866,439	1.903
69	T282	103.0	447,748	4,866,449	2.030
70	T283	102.0	453,850	4,866,500	1.903

		Maximum Sound Power	Easting	Northing	Wind Turbine Maximum
	Source ID	Level (dBA)	(m)	(m)	Electrical Power Rating (MW)
71	T284	102.0	451,128	4,866,599	1.903
72	T285	102.0	448,089	4,866,595	1.903
73	T286	102.0	450,448	4,866,861	1.903
74	T288	102.0	446,444	4,866,948	1.903
75	T289	102.0	447,281	4,866,949	1.903
76	T290	102.0	452,317	4,867,020	1.903
77	T291	102.0	447,004	4,867,074	1.903
78	T292	103.0	451,357	4,866,977	2.030
79	T294	102.0	448,059	4,867,123	1.903
80	T295	102.0	444,298	4,867,170	1.903
81	T296	102.0	444,632	4,867,170	1.903
82	T297	102.0	452,041	4,867,227	1.903
83	T298	102.0	450,581	4,867,214	1.903
84	T299	102.0	445,047	4,867,337	1.903
85	T300	101.0	446,825	4,867,373	1.824
86	T301	103.0	455,326	4,867,385	2.030
87	T302	102.0	451,091	4,867,420	1.903
88	T304	102.0	452,597	4,867,447	1.903
89	T305	102.0	454,565	4,867,531	1.903
90	T306	101.0	446,543	4,867,522	1.824
91	T307	103.0	448,682	4,867,545	2.030
92	T308	102.0	448,385	4,867,736	1.903
93	T309	102.0	444,574	4,867,752	1.903
94	T310	102.0	451,335	4,867,817	1.903
95	T311	102.0	448,951	4,867,924	1.903

		Maximum Sound Power	Easting	Northing	Wind Turbine Maximum
	Source ID	Level (dBA)	(m)	(m)	Electrical Power Rating (MW)
96	T312	102.0	444,424	4,868,091	1.903
97	T313	102.0	444,979	4,868,333	1.903
98	T314	106.0	445,927	4,853,859	2.300
99	T315	102.0	444,856	4,868,703	1.903
100	T317	102.0	447,144	4,869,137	1.903
101	T318	102.0	446,342	4,869,269	1.903
102	T319	102.0	445,951	4,869,417	1.903
103	T320	102.0	453,297	4,869,343	1.903
104	T321	102.0	453,702	4,869,366	1.903
105	T322	102.0	453,004	4,869,482	1.903
106	T323	102.0	448,152	4,869,619	1.903
107	T324	106.0	452,488	4,869,763	2.300
108	T325	102.0	447,844	4,869,827	1.903
109	T326	102.0	446,426	4,869,875	1.903
110	T327	102.0	446,060	4,869,832	1.903
111	T328	102.0	453,691	4,869,855	1.903
112	T329	102.0	450,203	4,869,995	1.903
113	T330	102.0	453,321	4,870,110	1.903
114	T332	102.0	448,132	4,870,157	1.903
115	T333	102.0	452,764	4,870,250	1.903
116	T334	105.0	444,196	4,870,282	2.221
117	T335	102.0	449,579	4,870,379	1.903
118	T336	101.0	444,731	4,870,544	1.824
119	T337	102.0	450,501	4,870,616	1.903
120	T338	103.0	444,414	4,870,526	2.030

	Source ID	Maximum Sound Power Level (dBA)	Easting (m)	Northing (m)	Wind Turbine Maximum Electrical Power Rating (MW)
121	T339	102.0	449,482	4,870,800	1.903
122	T340	103.0	449,894	4,870,969	2.030
123	T341	102.0	450,254	4,871,110	1.903
124	T342	102.0	449,778	4,871,359	1.903
125	T343	102.0	450,567	4,871,372	1.903
126	T344	102.0	450,219	4,871,563	1.903
127	T345	102.0	449,632	4,871,787	1.903
128	T346	102.0	450,079	4,871,964	1.903
129	T347	102.0	449,169	4,872,096	1.903
130	T348	104.0	448,708	4,872,653	2.126
131	T349	102.0	443,358	4,873,865	1.903
132	T350	104.0	443,674	4,873,854	2.126
133	T354	102.0	448,296	4,852,955	1.903
134	T355	102.0	448,030	4,853,186	1.903
135	T360	101.0	444,603	4,863,989	1.824
136	T362	101.0	446,386	4,869,573	1.824
137	T373	101.0	447,693	4,865,691	1.824
138	T374	101.0	454,008	4,869,633	1.824
139	T379	101.0	446,038	4,863,431	1.824
140	T380	103.0	444,754	4,861,772	2.030

	Source ID	Maximum Sound Power Level (dBA)	Easting (m)	Northing (m)	Source Description
141	Tr 91	92.0	450,057	4,860,572	Transformer
142	Tr 92	92.0	450,019	4,860,502	Transformer
143	Tr 93	92.0	449,626	4,863,347	Transformer

Note: The transformer substation Sound Power Level values in all the above tables includes the 5 decibel (dB) adjustment for tonality as prescribed in Publication NPC-104.

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

REASONS

- 1. Conditions A1 and A2 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 and A6 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 A7 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 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 C2, C3 and D 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 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. Conditions G1, H, I, J, K and Q 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 G2 is included due to the provisional nature of the supporting documentation submitted by the Owner with the application for approval. The Director has only approved the Stormwater Management Dry-Pond in principle, and this condition will ensure that, in accordance with the provisions of the Ontario Water Resources Act, prior to the commencement of construction of any part of the Works, the Director will have the opportunity to review detailed design drawings, specifications and an engineer's report containing detailed design calculations for that portion of the Stormwater Management Dry-Pond, in order to determine the proposed works' capability to comply with the Ministry's requirements stipulated in the terms and conditions of the Approval
- 11. Condition L is included to protect archaeological resources that may be found at the project location.
- 12. Condition M is included to ensure continued communication between the Company and the local residents.
- 13. Condition N 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.
- 14. Condition O 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.
- 15. Condition P 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.
- 16. Condition Q is included to ensure that the Facility is operated under the corporate name which appears on the application form submitted for this Approval and to ensure that the Director is informed of any changes.
- 17. Condition R is included to ensure continued communication between the Company and interested 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, 1993</u>, 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 <u>each</u> 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		1075 Bay Street, 6th Floor		Section 47.5, Environmental Protection Act
655 Bay Street, 15th Floor		Suite 605		Ministry of the Environment
Toronto, Ontario	AND	Toronto, Ontario	AND	2 St. Clair Avenue West, Floor 12A
M5G 1E5		M5S 2B1		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 23rd day of July, 2013

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

KR/

c: District Manager, MOE Owen Sound Paul Wendelgass, K2 Wind Ontario Inc. operating as K2 Wind Ontario Limited Partnership