

**RENEWABLE ENERGY APPROVAL**NUMBER 2344-9R6RWR  
Issue Date: July 16, 2015wpd White Pines Wind Incorporated  
2233 Argentia Rd, No. 102  
Mississauga, Ontario  
L5N 2X7Project: White Pines Wind Project  
Location: Prince Edward County, Ontario

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

the construction, installation, operation, use and retiring of a Class 4 wind facility with 29 turbines.

You have been approved for a renewable energy project in respect of a Class 4 wind facility consisting of the construction, installation, operation, use and retiring of a Class 4 wind facility with 27 turbines.

*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 Assessment Report, White Pines Wind Project, dated October 20, 2014, prepared by HGC Engineering and signed by Ian R. Bonsma P.Eng. & Brian Howe P.Eng.;
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 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 September 14, 2012, and signed by Khlaire Parré, Director of Renewable Energy Approvals, wpd White Pines Wind Incorporated, and an Addendum to the application for a Renewable Energy Approval dated August 2, 2013, and signed by Shawna Peddle, Senior Project Manager, Stantec Consulting Ltd., on behalf of wpd White Pines Wind Incorporated, and all supporting documentation submitted with the application, including amended documentation submitted up to July 15, 2015;
12. "Approval" means this Renewable Energy Approval issued in accordance with Section 47.5 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 (itches) 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 wpd White Pines Wind Incorporated 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 and Climate Change 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 wind turbine generators and 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  $L_{eq}$  and is measured in dB A-weighting (dBA);
25. "Facility" means the renewable energy generation facility, including the Equipment, as described in this Approval and as further described in the Application, to the extent approved by this Approval;
26. "In-water Works" means any construction related works or activity that takes place below the high water mark during flowing conditions and/or when water is present;

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;
30. "NTU" means Nephelometric Turbidity Unit;
31. "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;
32. "Noise Receptor" has the same meaning as in O. Reg. 359/09;
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. "Professional Engineer" means as defined in O. Reg. 359/09;
36. "Publication NPC-233" means Ministry Publication NPC-233, "Information to be Submitted for Approval of Stationary Sources of Sound", October 1995;
37. "Qualified Independent Structural Engineer" means a Professional Engineer with training and/or experience in structural engineering and is not representing the Company and who was not involved in preparing the heritage assessment reports or the protected properties report;
38. "Qualified Inspector" means a person with training and/or experience in erosion and sediment control and stormwater management, not representing the Company who was not involved in preparing the stormwater management and erosion and sediment control plans;
39. "Qualified Person" means a person that includes Engineer, Hydrogeologist, or a person with training and/or experience in erosion and sediment control and stormwater management;
40. "Qualified Professional" means with respect to Blanding's Turtles, a person with particular expertise who is trained or qualified;
41. "Significant Storm Event" means a minimum of 10 mm of rain in any 24 hour period as measured at the closest Environment Canada weather station;

42. "Sound Level" means the A-weighted Sound Pressure Level;
43. "Sound Level Limit" is the limiting value described in terms of the one hour A-weighted Equivalent Sound Level  $L_{eq}$ ;
44. "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;
45. "Sound Pressure" means the instantaneous difference between the actual pressure and the average or barometric pressure at a given location. The unit of measurement is the micro pascal ( $\mu\text{Pa}$ );
46. "Sound Pressure Level" means twenty times the logarithm to the base 10 of the ratio of the effective pressure ( $\mu\text{Pa}$ ) of a sound to the reference pressure of  $20 \mu\text{Pa}$ ;
47. "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 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.
- A8. 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 directions provided by that ministry in respect of the Company's plans to restore the project location to its previous agricultural capacity.

**B - EXPIRY OF APPROVAL**

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

**C - NOISE PERFORMANCE LIMITS**

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

<b>Wind Speed (m/s) at 10 m height</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
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Sound Level Limits, dBA	40.0	40.0	40.0	43.0	45.0	49.0	51.0
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- (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. Within fifteen (15) days of the date of this Approval, the Company shall submit to the District Manager and the Director an updated Acoustic Assessment Report for the approved turbines; the updated report shall exclude the turbines designated as source ID Nos. WTG 7 and WTG 11 in the Acoustic Assessment Report.

**D – CONFIRMATION OF VACANT LOT NOISE RECEPTORS**

- D1. The locations identified as vacant lot receptors in 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.

**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;
  - b) the Points of Reception should be located in the direction of prevailing winds from the Facility; and
  - c) subject to clauses (a) and (b) above and a written agreement by the Director, a location other than a Point of Reception may be selected if the Company provides clear and substantiated evidence to the Director and the District Manager that access to the Point(s) of Reception is not possible.
- (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.
- E2. 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 twelve (12) months or such other date as agreed to in writing by the Director, 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 eighteen (18) months or such other date as agreed to in writing by the Director, 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 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 Ministry Publication NPC-233 and no later than six (6) months after the commencement of the operation of the Facility or a date agreed to by the Director.

#### **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 CAN/CSA –IEC 61400-11-07;
  - (2) the acoustic emission measurements shall be performed by an Independent Acoustical Consultant; and
  - (3) the acoustic emission measurements shall be performed on two (2) of the wind turbine generators, used in the Facility.



- 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 CAN/CSA –IEC 61400-11-07 Standard by an Independent Acoustical Consultant, no later than twelve (12) months after the commencement of the operation of the Facility.
- F3. In addition to the requirements described in Condition F2, the following items must be included in the compliance summary:
- (1) sound power levels (overall A-weighted levels and frequency spectra in octave bands for each wind speed) of the wind turbine generators;
  - (2) tonal audibility values (for each wind speed) of the wind turbine generators;
  - (3) a statement that the wind turbine generators overall A-weighted sound power levels, do not exceed the maximum sound power levels specified in the Schedule B of the Approval; and
  - (4) a statement that the wind turbine generators tonal audibility values, as per Condition F3(2), comply with the maximum tonal audibility value of 0.3 dB.

## **G - STORMWATER MANAGEMENT, EROSION AND SEDIMENT CONTROL AND SURFACE WATER MONITORING**

### **General**

- G1. The Company shall prepare and submit a site-specific stormwater management plan and erosion and sediment control plan for the construction, installation, use, operation, maintenance and retiring of the Facility to the Director and the District Manager at least one month prior to the commencement of construction of the Facility.
- G2. The Company shall not commence construction of the Facility until the site-specific stormwater management plan and erosion and sediment control plan for the Facility has been approved in writing by the Director.
- G3. The site-specific stormwater management plan and erosion and sediment control plan shall:
- (1) Include details on erosion, sediment, stormwater management, spill control, and response plan for all construction-related activities for the Facility;
  - (2) Be prepared by a Qualified Person; and
  - (3) Comply with the Ministry's Guideline B-6 "*Guidelines for Evaluating Construction Activities on Water Resources* ", January 1995, "*Stormwater Management Planning and Design Manual* ", March 2003, and "*Erosion and Sediment Control Guideline for Urban Construction, as Compiled by the Greater Golden Horseshoe Conservation Authority* ", December 2006.

- G4. The Company shall take all measures necessary to prevent damages (or any related impacts) to neighbouring properties, buildings, bridges, structures, roads, railway lines and/or other infrastructure that may be impacted by the discharge/drainage from the site.
- G5. The Company shall install and maintain the stormwater management and erosion and sediment control measures as detailed in the plans required under Condition G1. No construction shall commence until the pre-construction measures outlined in the plans have been installed.
- G6. The Company shall employ a Qualified Inspector to inspect all erosion and sediment control and stormwater management measures, and perform all monitoring and measurements such as turbidity, as outlined in Conditions G8 and G15.
- G7. The erosion and sediment control and stormwater management measures shall be maintained during construction and inspected daily by the Company, and shall be inspected by a Qualified Inspector following precipitation events during the spring freshet and after any Significant Storm Event. These measures shall continue until such a time as the Qualified Inspector determines that the measures are no longer required or the Qualified Inspector deems that the risk of surface water/environmental impacts from the construction activity is negligible.
- G8. For the duration of construction, the Company shall require the Qualified Inspector to monitor in-field turbidity levels for all project components/construction which takes place within 30 m of the high water mark of a waterbody in accordance with the following:
- (1) Monitoring shall be conducted on a daily basis upstream of the construction related activity, and downstream of the construction related activity during Significant Storm Events and the spring freshet;
  - (2) If the average (arithmetic mean) daily turbidity level downstream of the works exceeds the Canadian Council of Ministers of the Environment Canadian Water Quality Guidelines (CCME-CWQG) for the Protection of Aquatic Life for a short-term or long-term exposure as defined in the Canadian Environmental Quality Guidelines, Canadian Council of Ministers of the Environment, 1999, and as updated, the Company shall notify the Spills Action Centre (SAC) (1-800-268-6060 (toll-free, province-wide), or at 416-325-3000 (Toronto area), or 1-855-889-5775 (TTY)), within 24 hours and the Company shall implement the response plan to prevent further migration of Turbid Water into the watercourse(s). Turbid Water shall be defined as any discharge water or diverted water with a maximum increase of 5 NTUs above the receiving stream's background levels.
- G9. When there is an overlap between regulatory requirements, the Company shall apply the more stringent and the more protective requirements for water bodies, natural heritage features and fish habitat.
- G10. The Company shall ensure that runoff/stormwater does not contain a concentration of oil or petrochemicals that could be detected as a visible film, sheen or discoloration, be detected by odour, cause the tainting of any edible aquatic organism, form deposits on shorelines or bottom sediments, or that could be deleterious to aquatic organisms.

- G11. The Company shall ensure that water pumped from any excavations is not discharged at a rate or in a quantity which will cause downstream flooding, erosion, or environmental impact, and that appropriate sediment control measures such as sediment basin and filter strips will be employed as necessary at the discharge location.
- G12. The Company shall ensure that construction works and related activities are located a minimum of 30 metres from the high water mark of water bodies, as identified in the site-specific stormwater management plan and erosion and sediment control plan as per Condition G1.
- G13. The Company shall maintain records of all inspections, monitoring and sampling data, and maintenance carried out pursuant to Conditions G1 to G12 and G15 (for in-water works), which shall be made available for inspection by the Ministry, upon request. The records shall include the name of the Company's representative conducted the inspections and/or Qualified Inspector, date and timing of inspections and all remedial actions taken.

### **In-water Works During Construction**

- G14. In-water Works shall be completed in a manner that protects fish habitat and other sensitive aquatic species/habitats.
- G15. The Company shall monitor in-field turbidity levels for the duration of construction or until such a time as the Qualified Inspector determines that the erosion and sediment control measures are no longer required and/or that the risk of surface water/environmental impacts are negligible, in accordance with the following:
- (1) Monitoring shall be conducted on a daily basis upstream of the Facility within the waterbody(s), and downstream of the Facility within the waterbody(s);
  - (2) The Company shall notify the District Manager if the turbidity downstream of the erosion and control works is greater than 8 NTU (as per CCME-CWQG) from that measured upstream. The Company shall immediately implement additional erosion and sediment control measures to reduce or mitigate the sediment related impacts; and
  - (3) The Company shall collect water samples from a location immediately upstream of the In-water Works, and from a location immediately downstream of the In-water Works to be analyzed for Total Suspended Solids (TSS). The TSS sampling shall take place at least once daily during In-water Works related construction, unless otherwise directed by the Ministry.
- G16. The Company shall install all In-water Works in a manner which:
- (1) Maintains the stream bed, substrates, stream bank, instream and near-shore habitat, and flow characteristics, absent of any authorizations such as timing restrictions and/or mitigation requirements from partner Ministries and agencies; and
  - (2) Adheres to timing restrictions and/or mitigation requirements of partner Ministries and agencies.

## **H - WATER TAKING ACTIVITIES**

H1. The Company shall not take more than 50,000 litres of water on any day by any means during the construction, installation, use, operation, maintenance and retiring of the Facility.

## **I - SEWAGE WORKS OF THE TRANSFORMER SUBSTATION SPILL CONTAINMENT FACILITY**

- I1. The Company shall design and construct a transformer substation oil spill containment facility which meets the following requirements:
- (1) the spill containment facility 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. This containment area shall have:
    - (a) an impervious floor with walls of reinforced concrete or impervious plastic liners, sloped toward an outlet / oil control device, allowing for a freeboard of 0.25 metres terminating approximately 0.30 metres above grade to prevent external stormwater flows from entering the facility. The facility shall have a minimum of 300mm layer of crushed stoned (19mm to 38mm in diameter) within, all as needed in accordance to site specific conditions and final design parameters; or
    - (b) a permeable floor with impervious plastic walls and around the transformer pad; equipped with subsurface drainage with a minimum 50mm diameter drain installed on a sand layer sloped toward an outlet for sample collection purposes; designed with an oil absorbent material on floor and walls, and allowing for a freeboard of 0.25 metres terminating approximately 0.30 metres above grade to prevent external stormwater flows from entering the facility. The facility's berm shall be designed as needed in accordance to site specific conditions and the facility shall have a minimum 300mm layer of crushed stoned (19mm to 38mm in diameter) on top of the system, as needed in accordance to site specific conditions and final design parameters.
  - (2) the spill containment facility shall be equipped with an oil detection system; it also shall have a minimum of two (2) PVC pipes (or equivalent material) 50mm diameter to allow for visual inspection of water accumulation. One pipe has to be installed half way from the transformer pad to the vehicle access route;
  - (3) the spill containment facility shall have appropriate sewage appurtenances as necessary, 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 under Condition I4; and
  - (4) the Company shall have a qualified person on-site during construction to ensure that the system is installed in accordance with the approved design and specifications.

I2. The Company shall:

- (1) within six (6) months after the completion of the construction of the transformer substation spill containment facility, provide to the District Manager an engineering report and as-built design drawings of the sewage works for the spill containment facility and any stormwater management works required for it, signed and stamped by an independent Professional Engineer licensed in Ontario and competent in electrical and environmental engineering or retain two Professional Engineers licensed in Ontario (one competent in environmental engineering and the other electrical engineering) to work together simultaneously on the project. The engineering report shall include the following;
  - (a) as-built drawings of the sewage works for the spill containment facility and any stormwater management works required for it;
  - (b) a written report signed by a qualified person confirming the following:
    - (i) on-site supervision during construction
    - (ii) in case of a permeable floor systems: type of oil absorbent material used (for mineral-based transformer oil or vegetable-based transformer oil, make and material's specifications)
    - (iii) use of stormwater best management practices applied to prevent external surface water runoff from entering the spill containment facility, and
    - (iv) confirm adequacy of the installation in accordance with specifications.
  - (c) confirmation of the adequacy of the operating procedures and the emergency procedures manuals as it pertains to the installed sewage works.
  - (d) procedures to provide emergency response to the site in the form of pumping and clean-up equipment within 24 hours after an emergency has been identified. Such response shall be provided even under adverse weather conditions to prevent further danger of material loss to the environment.
- (2) as a minimum, the Company shall check the oil detection systems on a monthly basis and create a written record of the inspections;
- (3) ensure that the effluent is 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;
- (4) immediately identify and clean-up all losses of oil from the transformer;
- (5) upon identification of oil in the spill containment facility, take immediate action to prevent the further occurrence of such loss;

- (6) 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.
- (7) in the event of finding water accumulation in the PVC pipes at the time of inspection, as per Condition I4, the Company shall: (a) for impervious floors, inspect the sewage appurtenances that allow drainage of the concrete pit; or (b) for permeable systems, replace the oil absorbent material to ensure integrity of the system performance and design objectives.
- (8) for permeable floor systems, the Company shall only use the type of oil specified in the design, i.e. mineral-based transformer oil or vegetable-based transformer oil. If a change is planned to modify the type of oil, the Company shall also change the type of the oil absorbent material and obtain approval from the Director to amend this Approval before any modification is implemented.

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:

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

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

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:

<b>Effluent Parameters</b>	<b>Measurement Frequency and Sample Points</b>	<b>Sample Type</b>
Oil and Grease	Quarterly, i.e. four times over a year, relatively evenly spaced having a minimum two (2) of these samples taken within 48 hours after a 10mm rainfall event.	Grab

- (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, there are no exceedances of the maximum concentration set out in the table for Concentration Objective, the Company may reduce the measurement frequency of effluent monitoring to a frequency specified by the District Manager in writing, provided that the new specified frequency is not less than once a year.

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**

### **GENERAL**

- J1. The Company shall implement the Environmental Effects Monitoring Plan for the White Pines Wind Farm, titled Environmental Effects Monitoring Plan, 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 and Forestry in order to comply with O. Reg. 359/09.
- *White Pines Wind Project Natural Heritage Assessment and Environmental Impact Study*, dated May 2012 and prepared by Stantec Consulting Ltd.
  - *White Pines Wind Project Natural Heritage Assessment and Environmental Impact Study - Addendum*, June 2012 prepared by Stantec Consulting Ltd.
  - *White Pines Wind Project Natural Heritage Assessment and Environmental Impact Study - Addendum 2*, March 2013 prepared by Stantec Consulting Ltd.

- J2. If the Company determines that it must deviate from the Environmental Effects Monitoring Plan or the Environmental Impact Study or Addenda thereto, described in Condition J1, the Company shall contact the Ministry of Natural Resources and Forestry and the Director, prior to making any changes to the Environmental Effects Monitoring Plan or the Environmental Impact Study or Addenda, and follow any directions provided.

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

- J3. The Company shall implement the post-construction monitoring described in the Environmental Effects Monitoring Plan, described in Condition J1, including the additional monitoring:
- (1) Three years Disturbance Monitoring for significant Shrub-successional Breeding Bird habitat (ssb1, ssbb2, ssbb3, ssbb4, ssbb5, ssbb6 and ssbb7), including weekly monitoring between May 1 and July 15 for all turbines located within significant Shrub-successional Breeding Bird habitat (turbines 13, 17, 18, 19, 23, 24, 26, 27, 28, and 29) and turbines within 120 m of significant Shrub-successional Breeding Bird habitat (turbines 12, 14, 15, and 16); and
  - (2) Three years Disturbance Monitoring for significant Landbird Migratory Stopover Areas (mlsa1 and mlsa2), including weekly monitoring between April 1 and May 30 for all turbines located within significant Landbird Migratory Stopover Areas (turbines 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 23, 24, 26, 28, and 29) and turbines located within 120 m of significant Landbird Migratory Stopover Areas (turbines 15, and 27).

### **POST-CONSTRUCTION MONITORING – BIRDS AND BATS**

- J4. The Company shall implement the post-construction bird and bat mortality monitoring described in the Environmental Effects Monitoring Plan, described in Condition J1, at a minimum of 10 constructed turbines to be selected in consultation with the Ministry of Natural Resources and Forestry.

### **THRESHOLDS AND MITIGATION**

- J5. The Company shall contact the Ministry of Natural Resources and Forestry and the Director if any of the following bird and bat mortality thresholds, as stated in the Environmental Effects Monitoring Plan for the White Pines Wind Farm described in Condition J1, exceeds:
- (1) 10 bats per turbine per year;
  - (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 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) at multiple turbines during a single monitoring survey.



- J6. If the bat mortality threshold described in Condition J5 (1) is exceeded, the Company shall:
- (1) implement operational mitigation measures consistent with those described in the Ministry of Natural Resources and Forestry 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:
    - (a) adjust 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 for the operating life of the Facility.
  - (2) implement an additional three (3) years of effectiveness monitoring.
- J7. If the bat mortality threshold described in Condition J5 (1) is exceeded after operational mitigation is implemented in accordance with Condition J6, the Company shall prepare and implement a contingency plan, in consultation with the Ministry of Natural Resources and Forestry and the Director, to address mitigation actions which shall include additional mitigation and scoped monitoring requirements.
- J8. If either of the bird mortality thresholds described in Conditions J5 (2), J5 (3) or J5 (4) are 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 J4, 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.
- J9. If either of the bird mortality thresholds described in Conditions J5(2), J5(3) or J5(4) are 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, the Director and the Ministry of Natural Resources and Forestry, for the first three (3) years following the implementation of mitigation.
- J10. If either of the bird mortality thresholds described in Conditions J5(5) or J5(6) are 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, the Director and the Ministry of Natural Resources and Forestry.

- J11. If any of the bird mortality thresholds described in Conditions J5(2), J5(3) or J5(4) are exceeded while monitoring is being implemented in accordance with Conditions J8 or J9, or if either of the bird mortality thresholds described in Conditions J5(5) or J5(6) are exceeded after mitigation is implemented in accordance with Condition J10, the Company shall contact the Director and the Ministry of Natural Resources and Forestry 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, the Director and the Ministry of Natural Resources and Forestry.

## REPORTING AND REVIEW OF RESULTS

- J12. The Company shall report, in writing, the results of the post-construction disturbance monitoring described in Condition J3, to the Director and the Ministry of Natural Resources and Forestry 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.
- J13. The Company shall report, in writing, bird and bat mortality levels to the Director and the Ministry of Natural Resources and Forestry 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 J5(5) or J5(6) are exceeded, the Company shall report the mortality event to the Director and the Ministry of Natural Resources and Forestry 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 and Forestry within 24 hours of observation or the next business day;
  - (3) if either of the bat mortality thresholds described in Condition J5(1) is exceeded, the Company shall report mortality levels to the Director and the Ministry of Natural Resources and Forestry for the additional three (3) years of effectiveness monitoring described in Condition J6, on an annual basis and within (3) months of the conclusion of the October mortality monitoring for each year;
  - (4) if any of the bird mortality thresholds described in Conditions J5(2), J5(3), or J5(4) are exceeded for turbines located within 120 m of bird significant wildlife habitat, the Company shall report mortality levels to the Director and the Ministry of Natural Resources and Forestry for the additional three (3) years of effectiveness monitoring described in Condition J8, on an annual basis and within three (3) months of the conclusion of the November mortality monitoring for each year;

- (5) if any of the bird mortality thresholds described in Conditions J5(2), J5(3), or J5(4) are exceeded for turbines located outside 120 m of bird significant wildlife habitat, the Company shall report mortality levels to the Director and the Ministry of Natural Resources and Forestry for the additional two (2) years of cause and effects 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; and
- (6) if the Company implements operational mitigation following cause and effects monitoring in accordance with Condition J9, the Company shall report mortality levels to the Director and the Ministry of Natural Resources and Forestry for the three (3) years of subsequent 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.

J14. The Company shall publish the following documents on the Company's website:

- (1) any modifications to the Environmental Effects Monitoring Plan as described in Condition J2 within ten (10) days of submitting the final plan to the Director and the Ministry of Natural Resources and Forestry;
- (2) the results of the post-construction disturbance monitoring as described in Condition J12 within ten (10) days of submitting the final report(s) to the Director and the Ministry of Natural Resources and Forestry; and
- (3) annual bird and bat mortality monitoring as described in Condition J13 with the exception of subsection J13(2), within ten (10) days of submitting the final report(s) to the Director and the Ministry of Natural Resources and Forestry.

#### **ADDITIONAL POST-CONSTRUCTION REQUIREMENTS**

J15. As identified in the Environmental Effects Monitoring Plan, described in Condition J1, a Natural Areas Management Strategy will be developed for lands within the Project Location and 120 m Zone of Investigation. The strategy will be designed to restore as well as enhance and preserve the natural heritage qualities of the natural habitats currently found within the Project Location and Zone of Investigation, and will include consideration of all natural areas, such as woodlands, wetlands and alvar habitats.

#### **K - ENDANGERED SPECIES ACT REQUIREMENTS**

K1. The Company shall ensure that activities requiring authorization under the *Endangered Species Act, 2007* will not commence until necessary authorizations are in place.

#### **L - BLANDING'S TURTLES AVOIDANCE MEASURES**

- L1. The Company shall implement and adhere to the avoidance techniques and best management practices to avoid adverse impacts to Blanding's Turtles and its habitat, in accordance with the *Species at Risk Report White Pines Wind Project*, dated August 2012 and prepared by Stantec Consulting Ltd., and the *White Pines Wind Project Natural Heritage Assessment and Environmental Impact Study - Addendum 2*, March 2013 prepared by Stantec Consulting Ltd., and including but are not limited to the following:
- (1) The Company shall avoid all Blanding's Turtle overwintering habitat, during the overwintering period of October 15 to April 15.
  - (2) The Company shall not perform in-water works from October 15 to April 15 of any year as turtles could be hibernating.
  - (3) Where possible, construction and maintenance activities including vegetation clearing, road construction and site preparation for project components located within Blanding's Turtle habitat shall only occur between October 15 and April 30.
    - (a) If construction and maintenance activities between May 1 and October 14 are not possible, every attempt must be made to avoid harassment or injury to Blanding's Turtles, including, but not limited to the following further restrictions:
      - (i) Immediately prior to construction and maintenance activities a Qualified Professional shall search all work areas to identify the presence of Blanding's Turtles.
      - (ii) Should a Blanding's Turtle(s) be observed within the project location, all construction or maintenance activity (within 30 m of the observation) shall cease immediately until the Blanding's Turtle vacates at least 30 m from the construction area or maintenance activity of its own accord.
  - (4) Prior to construction, the limits of vegetation clearing shall be clearly staked in the field, as appropriate. The Company shall ensure that no construction disturbance occurs beyond the staked limits and that edges of sensitive areas adjacent to the work areas are not disturbed. The Company shall employ regular monitoring of the limits of clearing as determined by a Qualified Professional to ensure the objective of minimal disturbance beyond the staked limits. Should monitoring reveal that disturbance has occurred beyond staked limits, the Company shall, at the direction of a Qualified Professional, take mitigation action that could include rehabilitation of the disturbed area to pre-disturbance conditions, with enhancement of any disturbed areas.
  - (5) If a nesting turtle or the nest site of a Blanding's Turtle is encountered within the project location, the Qualified Professional shall determine if a construction or maintenance activity may adversely affect the nesting turtle or nest site, and shall provide any direction and/or measures to avoid impact. The Company shall follow any direction and/or measures as recommended by the Qualified Professional.

- (6) The Company shall retain a Qualified Professional who will prepare a staff training manual at least 15 business days prior to when a person begins construction activities or maintenance activities. The manual shall describe at a minimum how to identify Blanding's Turtles and steps to be taken upon encountering a Blanding's Turtle.
- (7) All persons entering the site shall be provided training with the manual about Blanding's Turtles and proper steps to take upon encountering a Blanding's Turtle. The training shall occur at least 15 business days prior to when a person begins construction activities or maintenance activities within the project location.
- (8) Maintenance vehicle traffic on access roads shall be restricted to daylight hours from April 15 to October 15. Vehicle speeds shall be restricted to 15 km/h or less.
- (9) The Company shall install speed limit signage to communicate the 15 km/h limit on all access roads.
- (10) The Company shall ensure that gates prohibiting access are installed at the entrance to all access roads that occur in or adjacent to Blanding's Turtle habitat.
- (11) The Company shall install-turtle crossing signs along access roads that occur in or adjacent to Blanding's Turtle habitat (i.e., to turbines T12-T24 and T26-T29).
- (12) All observations of Blanding's Turtles on the site shall be recorded and submitted to the District Manager and the Director within two business days of the observation, with any observed fatalities reported to the District Manager and the Director immediately.

## **M - CULTURAL HERITAGE RESOURCES AND PROTECTED PROPERTIES**

### **Construction Activities**

M1. The Company shall avoid construction activities within 60 metres of cultural heritage resources identified below. Where construction within 60 metres cannot be avoided, maximum acceptable vibration levels (peak particle velocity (PPV) levels) shall be determined by a Qualified Independent Structural Engineer prior to the commencement of any construction activities (pre-construction survey):

- 310 Bond Road
- 3705 County Road 10
- 757, 896, 919, 1038, 1071, 1106, 1112, 1177, 1210, 1247, 1327, 1375 Royal Road
- The Royal Road Streetscape
- Rose/Frost Farm Complex
- 1078 Royal Road
- The Royal Street Cheese Factory
- 45 and 114 Maypul Layn Road
- 1568 County Road 5
- 1582 and 1590 County Road 5

- 823 County Road 4
- 840 County Road 4
- 364 May Road
- 635 County Road 1 (Orser Hall and Orser Cemetery)
- 622 County Road 1
- 550 County Road 1
- 530 County Road 1
- 478 County Road 1
- 261 County Road 1
- 111 County Road 1
- 61 County Road 1
- 52 County Road 1
- 11 County Road 1
- 314 County Road 1
- 396 County Road 10
- 416 County Road 10
- 506 County Road 10
- 554 County Road 10
- 9 Mowbray Road
- 119 Mowbray Road
- 153 Mowbray Road
- 46 Crowes Road
- 606 Crowes Road
- Scott's Mill
- 2847 County Road 10
- 2741 County Road 10
- 2653 County Road 10
- 2561 County Road 10
- 131 County Road 1
- 440 Miller Road
- 36 County Road 1

M2. The Qualified Independent Structural Engineer shall perform a pre and post construction inspection of any structures located on the heritage resources identified above and their foundations to confirm their capacity to withstand project-related vibrations.

M3. The Company shall perform ongoing vibration monitoring if construction is within the 60 metre bufferzone to ensure that PPV levels are within the acceptable level as determined in accordance with Condition M1. Should levels be exceeded, the Company shall cease construction activities within the 60 metre bufferzone until an acceptable solution can be identified by the Qualified Independent Structural Engineer.

- M4. The Company shall avoid changes to the trail surface of Millennium Trail from installation of below-grade infrastructure. Landscaping features along Royal Road / Maypul Layn Road streetscape and Millennium Trail, such as trees, fencing or vegetation shall not be removed or damaged for the installation of the transmission infrastructure. If disturbances cannot be avoided, they shall be repaired immediately following project construction activities, to restore the landscaping features to pre-construction conditions.
- M5. Removal of, or damage to, trees in all areas where construction activities take place shall be avoided to the greatest extent practicable, including any roads/transportation routes.
- M6. Any extant cabins, log houses or built features encountered in wooded portions of the project location during construction of project infrastructure shall not be removed without prior undertaking of a Heritage Impact Assessment of the resource.

### **Decommissioning Activities**

- M7. The Company shall permanently deposit a record of current conditions (reports documenting the pre-construction condition of the project location), including the *White Pines Wind Project Heritage Assessment Report* , dated October 15, 2013 and prepared by Stantec Consulting Ltd., and the *White Pines Wind Project Interconnection Line Heritage Assessment Report* , dated July 30, 2013 and prepared by Stantec Consulting Ltd., at the local library within 3 months of the start of operation to facilitate access to pre-construction conditions at the end of the Project lifespan.
- M8. The Company shall review the heritage assessment reports mentioned above prior to decommissioning activities to ensure that decommissioning efforts return the project location lands as close to pre-construction conditions as possible.

### **N - MUNICIPAL CONSULTATION**

- N1. Within three (3) months of receiving this Approval, the Company shall prepare a Traffic Management Plan and provide it to Prince Edward County.
- N2. Within three (3) months of having provided the Traffic Management Plan to Prince Edward County, the Company shall make reasonable efforts to enter into a Road Users Agreement with Prince Edward County.
- N3. If a Road Users Agreement has not been signed with Prince Edward County within three (3) months of having provided the Traffic Management Plan to Prince Edward County, the Company shall provide a written explanation to the Director as to why this has not occurred.
- N4. The Company shall make reasonable efforts to keep Prince Edward County informed of construction and operation activities associated with the facility, and make reasonable efforts to ensure that all commitments made to Prince Edward County are met.

### **O - EMERGENCY RESPONSE AND COMMUNICATIONS PLAN**

- O1. The Company shall prepare an Emergency Response and Communications Plan to address each project phase (construction, operation and decommissioning) and shall include at a minimum the following information:
- (1) Hazard identification and assessment;
  - (2) Communication system (including updated emergency contact information for the Company) and procedures;
  - (3) Administration of the plan (including roles and responsibilities, and emergency resources); and
  - (4) Emergency response procedures.
- O2. The Company shall consult with Prince Edward County, and any interested parties about the content of the plan and consider any comments received.
- O3. The Company shall finalize the plan prior to the commencement of construction.

#### **P - ARCHAEOLOGICAL RESOURCES**

- P1. The Company shall implement all of the recommendations, if any, for further archaeological fieldwork and for the protection of archaeological sites found in the following consultant archaeologists' reports included in the Application, and which the Company submitted to the Ministry of Tourism, Culture and Sport as required by O. Reg. 359/09:
- 2012, *St 1 AA, White Pines Wind Project, Prince Edward County, ON. Twp Lots A-Q; Various Lots in: West Bay; Lake Ontario W of Point Traverse; Con 1 S of Black River, Twp of S Marysburgh; and Various Lots in: Cons 2-5 S Side of E Lake, historic Twp of Athol in Prince Edward County, ON* . Filed January 18, 2012 (Stantec Consulting)
  - 2012a, *Stage 2 Archaeological Assessment, Proposed White Pines Wind Project and Stage 1 & 2 Transmission Line and Substation Additions and Modifications, Prince Edward County, Ontario* . Filed June 25, 2012 (Adams Heritage)
  - 2012b, *Stage 1 and 2 - White Pines Wind Project - Transmission Line, Milford to Gorsline Road* . Filed December 28, 2012 (Adams Heritage)
  - 2013, *St 2 AA Proposed White Pines Wind Project and St 1 & 2 Transmission Line and Substation WPWF (1-41-013) St 2 Archaeological Report 11Jan2012, Prince Edward County, Ontario* . Filed December 18, 2013 (Adams Heritage)
- P2. Should any previously undocumented archaeological resources be discovered, the Company shall:
- (1) immediately cease all alteration of the area in which the resources were discovered;



- (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.

## **Q - COMMUNITY LIAISON COMMITTEE**

- Q1. 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;
  - (3) 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.
- Q2. 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.
- Q3. The Community Liaison Committee shall consist of at least one Company representative who shall attend all meetings.
- Q4. 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.
- Q5. 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.

- Q6. 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.
- Q7. 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.
- Q8. The Company shall ensure that all Community Liaison Committee meetings are open to the general public.
- Q9. 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.
- Q10. 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.

## **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 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 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.

### **S - AERONAUTICAL SYSTEMS**

- S1. The Company will notify NAV CANADA at least ten (10) business days prior to the start of construction and provide a copy of the notification to the Director and the District Manager on the same day as it is provided to NAV CANADA.

### **T - OPERATION AND MAINTENANCE**

- T1. 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.
- T2. The Company shall:
- (1) update, as required, the manual described in Condition T1; and
  - (2) make the manual described in Condition T1 available for review by the Ministry upon request.
- T3. The Company shall ensure that the Facility is operated and maintained in accordance with the Approval and the manual described in Condition T1.

### **U - RECORD CREATION AND RETENTION**

- U1. 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.
- U2. A record described under Condition U1 (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.
- U3. The Company shall retain, for a minimum of five (5) years from the date of their creation, all records described in Condition U1, and make these records available for review by the Ministry upon request.

## **V - NOTIFICATION OF COMPLAINTS**

- V1. The Company shall notify the District Manager of each complaint within two (2) business days of the receipt of the complaint.
- V2. The Company shall provide the District Manager with the written records created under Condition U2 within eight (8) business days of the receipt of the complaint.

## **W - CHANGE OF OWNERSHIP**

- W1. 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.

## **SCHEDULE A**

### **Facility Description**

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

- (a) a total of twenty-seven (27) REpower/Senvion wind turbine generators. All wind turbines rated each at a maximum of 2.05 MW, designated as source ID Nos. WTG 1 through WTG 6, WTG 8 through WTG 10, WTG 12 through WTG 29, each with a hub height of 100 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, two transformer substations, on-site access roads, underground cabling and distribution lines, and storage area,

all in accordance with the Application.

## SCHEDULE B

### Coordinates of the Equipment and Noise Specifications

Coordinates of the Equipment are listed below in UTM, Z18-NAD83 projection:

Source ID	Maximum Sound Power Level (dBA)	Easting (m)	Northing (m)	Source Description
WTG 1	104.2	331,642	4,865,658	Repower MM92 (Max Power 2.050kW)
WTG 2	104.2	331,865	4,865,330	Repower MM92 (Max Power 2.050kW)
WTG 3	104.2	332,014	4,864,994	Repower MM92 (Max Power 2.050kW)
WTG 4	104.2	333,433	4,866,108	Repower MM92 (Max Power 2.050kW)
WTG 5	104.2	332,520	4,864,336	Repower MM92 (Max Power 2.050kW)
WTG 6	104.2	333,551	4,864,775	Repower MM92 (Max Power 2.050kW)
WTG 8	104.2	329,738	4,862,665	Repower MM92 (Max Power 2.050kW)
WTG 9	104.2	330,014	4,863,071	Repower MM92 (Max Power 2.050kW)
WTG 10	104.2	330,179	4,863,665	Repower MM92 (Max Power 2.050kW)
WTG 12	104.2	330,801	4,861,293	Repower MM92 (Max Power 2.050kW)
WTG 13	104.2	331,200	4,861,043	Repower MM92 (Max Power 2.050kW)
WTG 14	104.2	331,403	4,861,423	Repower MM92 (Max Power 2.050kW)
WTG 15	104.2	331,767	4,861,704	Repower MM92 (Max Power 2.050kW)
WTG 16	104.2	331,776	4,860,976	Repower MM92 (Max Power 2.050kW)
WTG 17	104.2	332,089	4,861,211	Repower MM92 (Max Power 2.050kW)
WTG 18	104.2	334,176	4,861,229	Repower MM92 (Max Power 2.050kW)
WTG 19	104.2	334,338	4,861,685	Repower MM92 (Max Power 2.050kW)
WTG 20	104.2	334,828	4,862,019	Repower MM92 (Max Power 2.050kW)
WTG 21	104.2	335,897	4,863,241	Repower MM92 (Max Power 2.050kW)
WTG 22	104.2	336,233	4,862,927	Repower MM92 (Max Power 2.050kW)
WTG 23	104.2	337,875	4,861,966	Repower MM92 (Max Power 2.050kW)
WTG 24	104.2	338,470	4,862,038	Repower MM92 (Max Power 2.050kW)
WTG 25	104.2	340,676	4,865,691	Repower MM92 (Max Power 2.050kW)
WTG 26	104.2	341,997	4,866,196	Repower MM92 (Max Power 2.050kW)
WTG 27	104.2	342,616	4,864,922	Repower MM92 (Max Power 2.050kW)
WTG 28	104.2	343,062	4,865,366	Repower MM92 (Max Power 2.050kW)
WTG 29	104.2	343,677	4,865,454	Repower MM92 (Max Power 2.050kW)
TS1	102.0	327,860	4,880,714	North Transformer, 65 MVA
TS2	102.0	332,911	4,862,991	South Transformer, 65 MVA

Note: The Sound Power Level values of transformer substations "TS1 and TS2" in the above table includes the 5 decibel (dB) adjustment for tonality as prescribed in Publication NPC-104.

## **SCHEDULE C**

### **Noise Control Measures**

#### Acoustic Barriers

##### Transformer Substation TS2

one (1) two (2) sided 5.5 metres high acoustic barrier, positioned as per section five of the Acoustic Assessment Report. The acoustic barrier shall be continuous without holes, gaps and other penetrations, and having surface mass at least 20 kilograms per square metres.



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

*Reason for Refusal :*

Turbines designated as source ID Nos. WTG 7 and WTG 11 have been refused from the Approval to ensure that impacts to identified cultural resources and protected properties are mitigated sufficiently and appropriately.

*Reasons for Conditions:*

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 and C2 are 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 C3, C4 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 A8, G, H, I, J, K, L, and O 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 cultural heritage resources and protected properties. The protection of cultural heritage resources and protected properties in the Approval are based on the following heritage reports:
  - *White Pines Wind Project Heritage Assessment Report* , dated October 15, 2013 and prepared by Stantec Consulting Ltd
  - *White Pines Wind Project Interconnection Line Heritage Assessment Report* , dated July 30, 2013 and prepared by Stantec Consulting Ltd.
11. Condition N is included to ensure continued communication between the Company and the local municipalities.

12. Condition P is included to protect archaeological resources that may be found at the project location.
13. Condition Q is included to ensure continued communication between the Company and local residents.
14. Condition R is included to ensure continued communication between the Company and interested Aboriginal communities.
15. Condition S is included to ensure that the necessary mitigation measures have been implemented at surrounding airports/aerodromes prior to erecting turbines.
16. Condition T 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.
17. Condition U 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.
18. Condition V 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.
19. Condition W 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.

## NOTICE REGARDING HEARINGS

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

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

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

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

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

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

*This notice must be served upon:*

The Secretary\*

The Environmental Commissioner

The Director

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

AND

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

AND

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

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

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

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

DATED AT TORONTO this 16th day of July, 2015



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Mohsen Keyvani, P.Eng.  
Director  
Section 47.5, *Environmental Protection Act*

RA/

c: Area Manager, MOECC Belleville  
c: District Manager, MOECC Kingston - District  
Shawna Peddle, Stantec Consulting Ltd.