

RENEWABLE ENERGY APPROVALNUMBER 0300-8UQPKR
Issue Date: June 15, 2012

Grand Renewable Wind LP / Grand Renewable Wind GP
Inc.
55 Standish Court
Mississauga, Ontario
L5R 4B2

Project: Near Haldimand Road 20
Location: Haldimand County,
N0A 1E0

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 a total name plate capacity of 148.6 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 Grand Renewable Energy Park-Noise Assessment Report Revision 2, dated May 29, 2012 prepared by Zephyr North Ltd. and signed by Carl Brothers P.Eng., Zephyr North Ltd, and an addendum entitled Grand Renewable Energy Park — Noise Assessment Report — Revision 2 — Addendum 1 dated May 29, 2012 prepared by Zephyr North Ltd. and signed by Carl Brothers P. Eng., Zephyr North Ltd. May 29, 2012.
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 Report-Transformer Substation" means a report presenting the results of the Acoustic Audit - Transformer Substation;
7. "Acoustic Audit - Transformer Substation" means an investigative procedure consisting of measurements and/or acoustic modelling of all noise sources comprising the transformer (100/133/166 MVA) assessed to determine compliance with the Sound Power Level specification of such transformer described in the Acoustic Assessment Report;
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 October 3, 2011, and signed by Jeong Tack Lee, President, Grand Renewable Wind GP Inc., on behalf of Grand Renewable Wind LP., 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 (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 Grand Renewable Wind GP Inc., as general partner for and on behalf of Grand Renewable Wind LP, the partnership under the laws of Ontario, and includes its successors and assignees;
19. "Compliance Protocol for Wind Turbine Noise" means the Ministry document entitled, Compliance Protocol for Wind Turbine Noise, Guideline for Acoustic Assessment and Measurement, PIBS# 8540e;
20. "Decibel" means a dimensionless measure of Sound Level or Sound Pressure Level, denoted as dB;
21. "Director" means a person appointed in writing by the Minister of the Environment pursuant to section 5 of the Act as a Director for the purposes of section 47.5 of the Act;
22. "District Manager" means the District Manager of the appropriate local district office of the Ministry where the Facility is geographically located;
23. "Equipment" means the 67 wind turbine generators and one (1) transformer substation, identified in this Approval and as further described in the Application, to the extent approved by this Approval;
24. "Equivalent Sound Level" is the value of the constant sound level which would result in exposure to the same total A-weighted energy as would the specified time-varying sound, if the constant sound level persisted over an equal time interval. It is denoted L_{eq} and is measured in dB A-weighting (dBA);
25. "Facility" means the renewable energy generation facility, including the Equipment, as described in this Approval and as further described in the Application, to the extent approved by this Approval;

26. "IEC Standard 61400-11" means the International Standard IEC Standard 61400-11, Wind turbine generator systems – Part 11: Acoustic noise measurement techniques, 2006;
27. "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;
28. "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;
29. "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;
30. "Noise Receptor" has the same meaning as in O. Reg. 359/09;
31. "O. Reg. 359/09" means Ontario Regulation 359/09 "Renewable Energy Approvals under Part V.0.1 of the Act" made under the Act;
32. "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;
33. "Sound Level" means the A-weighted Sound Pressure Level;
34. "Sound Level Limit" is the limiting value described in terms of the one hour A-weighted Equivalent Sound Level L_{eq} ;
35. "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;
36. "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 (μ Pa);
37. "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;
38. "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, at least six (6) months prior to the anticipated retirement date of the entire Facility, or part of the Facility, contact the Ministry of Agriculture, Food and Rural Affairs to discuss its plans for the decommissioning of the Facility, including Company's objective to restore the project location to its previous agricultural capacity.

A8. The Company shall provide the District Manager and the Director at least ten (10) days written notice of the following:

(1) the commencement of any construction or installation activities at the project location; and

(2) the commencement of the operation of the Facility.

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	40	40	43	45	49	51

- (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 as “VLSR” in the Table entitled “VacantLotLocations” in the document prepared by the Company entitled “*GRE10-NoiseAssessmentReport-R1-ResultsAndLocationsTable-20111207.xls*” are specified as Noise Receptors for the purposes of paragraph 2 of subsection 54 (1.1) of O. Reg. 359/09 and subclause 35 (1) (a) (ii) of O. Reg. 359/09.

E - ACOUSTIC AUDIT - TRANSFORMER SUBSTATION

- E1. The Company shall carry out an Acoustic Audit - Transformer Substation of the transformer substation (166 MVA transformer), and shall submit to the District Manager and the Director an Acoustic Audit Report – Transformer Substation prepared by an Independent Acoustical Consultant no later than six (6) months after the commencement of the operation of the Facility.

F - WIND TURBINE ACOUSTIC AUDIT - IMMISSION

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

G - WIND TURBINE ACOUSTIC AUDIT- EMISSION

- G1. 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 two (2) of each type of the wind turbine generator used in the Facility. Specifically on two (2) of the wind turbine generators rated at:
 - (a) 2.221 megawatts generating output capacity and
 - (b) 2.126 megawatts generating output capacity.
- G2. The Company shall submit to the District Manager and the Director an Acoustic Audit Report-Emission, prepared in accordance with Section 9 of the IEC Standard 61400-11 by an Independent Acoustical Consultant, no later than six (6) months after the commencement of the operation of the Facility.

H - STORMWATER MANAGEMENT

General

- H1. 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 Application including the report entitled Grand Renewable Energy Park Stormwater Management Report, dated February 10, 2011 and signed by Scott Robertson, P. Eng., Associate, Water Resources Project Manager .
- H2. The Company shall design, construct, install, use, operate, maintain and retire stormwater management works that shall cover the transformer substation area and the operation and maintenance building drainage area, for a total area of 59 hectares (ha), in accordance with any plans and specifications set out in this Approval and the Application.
- H3. The stormwater management works shall include the following, all in accordance with the plans and specifications set out in the Application:
- (1) a Transformer Substation area with an extended detention dry pond;
 - (2) an operation and maintenance building area with a constructed wetland; and

- (3) a vegetated swale / ditch system to divert and control clean stormwater from entering the developed areas within the Transformer Substation and operation and maintenance building areas and to control external flows.

H4. The Company shall notify the Director prior to making any material changes to the design and specifications described in Condition H3 and the Grand Renewable Energy Park Stormwater Management Report, dated February 10, 2011 and signed by Scott Robertson, P. Eng., Associate, Water Resources Project Manager.

Operation and Maintenance

H5. The Company shall ensure that the pond/wetland design minimum liquid retention volume is maintained at all times.

H6. The Company shall maintain the permanent pool depth to 1.0m within the forebay areas and monitor the accumulation of oil within the forebay or main cell.

H7. The Company shall inspect the stormwater management works semi-annually, i.e. twice per year, and, if necessary, clean and maintain the works to prevent the excessive build-up of sediments and/or vegetation.

H8. The Company shall include the following information in the operations and maintenance manual prepared under Condition O and the written records created under Condition P:

- (1) operating procedures for routine operation of the stormwater management works;
- (2) the date and results of all inspection, maintenance, and cleaning activities, including an estimate of the quantity of any materials removed; and
- (3) the date of each spill within the catchment area, including follow-up actions / remedial measures undertaken.

Effluent Visual Operations

H9. The Company shall ensure that the effluent from the stormwater management works 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.

H10. The Company shall conduct semi-annual, i.e. twice per year, walking inspections to identify areas of bare soil and/or the formation of erosive gullies, remediative efforts, areas of isolated ponding or sediment build-up.

Monitoring

H11. Upon commencement of the operation of the Facility, the Company shall establish and implement a monitoring program for the stormwater management works for a minimum period of five (5) years (with the option to request that the Director reduce the frequency of monitoring after three (3) years of satisfactory performance of the stormwater management works) in accordance with the following:

- (1) the Company shall take all samples and measurements for the purposes of Condition H10 (2) at a time and in a location characteristic of the quality and quantity of the effluent stream over the time period being monitored;
- (2) the Company shall collect and analyze the required samples at the sampling points listed in the table below in accordance with the measurement frequency and sample type specified, for each parameter in the table, and create a written record of the monitoring results:

Surface Water Monitoring	
Sample points:	
§ at pond/wetland inlets.	
§ at pond/wetland effluent discharge points.	
Frequency	Quarterly, i.e. four (4) times per year, at least once for the snowmelt freshet and the remaining within 72hours after a 15mm rainfall event.
Sample Type	Grab
Parameters	Total Suspended Solids, Total Phosphorus, Dissolved Oxygen, Oil & Grease, E. Coli, pH and Temperature.

- (3) the Company’s methods and protocols for any sampling, analysis and recording undertaken in accordance with Condition H10 (2) shall conform, in order of precedence, to the methods and protocols specified in the following documents:
 - (a) The Ministry's Procedure F-10-1, “Procedures for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works (Liquid Waste Streams Only)”, as amended from time to time by more recently published editions.
 - (b) The Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater" (January 1999), ISBN 0-7778-1880-9, as amended from time to time by more recently published editions.
 - (c) The publication "Standard Methods for the Examination of Water and Wastewater" (21st edition), as amended from time to time by more recently published editions.
- (4) The Company shall include all written records and information related to, or resulting from, the monitoring activities undertaken in accordance with Condition H10 in the written records created under Condition P. .

Annual Reporting

- H12. By March 31st of each calendar year, the Company shall prepare and submit to the District Manager an annual report for the previous calendar year which summarizes all of the activities undertaken and written records created in accordance with Condition H, including monitoring data collected, data analysis and interpretation of results, and inspection, operations and maintenance activities, as well as recommendations for any preventive, remediative and reactive measures needed to ensure compliance with Condition H and protection of the environment.
- H13. Within six (6) months of the completion of the construction of the Facility, the Company shall provide the District Manager with a stormwater management report that includes a detailed design of the stormwater management works for the collection, transmission, treatment and disposal of stormwater runoff from various catchment areas for the Facility, discharging to existing drainage patterns within the Wardells Creek watershed, and consisting of a vegetated swale / ditch and culvert system. The stormwater management report shall also include an operations manual describing the visual inspections, frequency, and any other activity necessary for the adequate operation of the stormwater management works.

I - SEWAGE WORKS OF THE TRANSFORMER SUBSTATION SPILL CONTAINMENT FACILITY

- I1. Prior to the construction of the transformer substation, the Company shall retain an independent Professional Engineer licensed in Ontario, and knowledgeable about electrical transformer substations and their associated sewage works, to prepare a design report on the spill containment facility for the transformer substation that shall contain the following:
- (1) final design drawings and specifications of the spill containment area and associated sewage works;
 - (2) operation and maintenance procedures for the spill containment facility including an emergency/contingency plan; and
 - (3) a monitoring program, including a groundwater monitoring program if a subsurface disposal system is proposed, which shall contain at a minimum one monitoring well immediately around the spill containment works and one on the property boundary down gradient from the transformer substation.
- I2. The Company shall ensure that the spill containment facility for the transformer substation meets the following requirements:
- (1) the containment facility shall have an impervious concrete floor and walls sloped toward an outlet, maintaining a freeboard of 0.25 metres terminating approximately 0.30 metres above grade, with an impervious plastic liner or equivalent, and 1.0 metre layer of crushed stoned within;
 - (2) the containment pad 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
 - (3) the oil control device shall be equipped with an oil detection system and appropriate sewage appurtenances as necessary (pumpout manhole, submersible pumps, level controllers, floating oil sensors, etc.).

- I3. The Company shall submit the design report for the spill containment facility prepared under Condition No. 11 to the Director and shall not commence the construction of the transformer substation until the Director provides written confirmation verifying that the Director is satisfied with the proposed sewage works.
- I4. The Company shall design, construct and operate the sewage works of the transformer substation spill containment facility 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

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

J - WATER TAKING ACTIVITIES

- J1. For foundation dewatering, if the amount of discharge exceeds 50,000 litres per day:
- (1) the inlet pump head shall be surrounded with clear stone and filter fabric;
 - (2) the discharge must be sampled each day that water is discharged and analyzed for total suspended solids (TSS). In the event that sampling results show that TSS in the discharge water exceeds 25 mg/L, the Company shall implement appropriate measures (settling tank or geosock or similar device) to mitigate these impacts; and,
 - (3) the Company shall regulate the discharge at such a rate that there is no flooding in the receiving water body or dissipate the discharge so that no soil erosion is caused that impacts the receiving water body.
- J2. For stream diversion, if the amount of discharge exceeds 50,000 litres per day and dam and pump technology is used:
- (1) the Company shall regulate the discharge at such a rate that there is no flooding in the downstream area and no soil erosion or stream channel scouring caused at the point of discharge. The Company shall use a discharge diffuser or other energy dissipation device, if necessary, to mitigate flows which physically alter the stream channel or banks; and,
 - (2) siltation control measures shall be installed at both the taking location upstream of the construction site and (if necessary) the discharge site and shall be sufficient for the volumes pumped. The Company shall take all measures to properly maintain these control devices throughout the construction period.

- J3. For water takings (by tanker) for the purposes of dust suppression, equipment washing, and similar activities:
- (1) notwithstanding the authorized rate of water taking, this Approval limits the taking of water at any site at the project location for up to 10% of the instantaneous streamflow present on the day or days of taking. The authorized water taking rate may therefore have to be adjusted downward to remain within this 10% maximum;
 - (2) prior to taking water from any site at the project location, the Company shall contact the Long Point Region Conservation Authority to determine if any low water conditions have been declared and are in effect. The Company shall not take water if a Level 2 or Level 3 low water condition has been declared; and,
 - (3) no modification to the existing stream channel by excavation or damming is permitted under this Approval.

K – NATURAL HERITAGE PRE- AND POST- CONSTRUCTION MONITORING

PRE CONSTRUCTION MONITORING

- K1. The Company shall implement the pre-construction monitoring described in the report included in the Application and entitled Grand Renewable Energy Park - Natural Heritage Assessment and Environmental Impact Study, dated October 2011, and prepared by Stantec Consulting Ltd. This shall include:
- a) Disturbance Monitoring for Woodland Breeding Birds; and
 - b) Disturbance Monitoring for Landbird Migratory Stopover Areas
- K2. If the Company determines that it must deviate from the pre-construction monitoring described in Condition K1, the Company shall contact the Southern Region Renewable Energy Operations Coordinator of the Ministry of Natural Resources and the Director, prior to making any changes to the methodology, and follow any directions provided.

POST CONSTRUCTION MONITORING, INCLUDING BIRD AND BAT MORTALITY MONITORING

- K3. The Company shall implement the Environmental Effects Monitoring Plan for Wildlife and Wildlife Habitat included as Attachment C to the report included in the Application and entitled Design and Operations Report, dated July 2011, and prepared by Stantec Consulting Ltd. This shall include:
- a) Disturbance Monitoring for Woodland Breeding Birds;
 - b) Disturbance Monitoring for Landbird Migratory Stopover Areas;
 - c) Visual Monitoring of hydrological conditions in wetlands and significant woodlands; and
 - d) Bird and Bat mortality monitoring.

K4. If the Company determines that it must deviate from the monitoring described in Condition K3, the Company shall contact the Southern Region Renewable Energy Operations Coordinator of the Ministry of Natural Resources and the Director, prior to making any changes to the Environmental Effects Monitoring Plan for Wildlife and Wildlife Habitat, and follow any directions provided.

REPORTING AND REVIEW OF RESULTS

K5. The Company shall contact the Southern Region Renewable Energy Operations Coordinator of the Ministry of Natural Resources and the Director if there are any applicable thresholds as described in the Environmental Effects Monitoring Plan for Wildlife and Wildlife Habitat reached or exceeded as follows:

- a) 10 bats per turbine per year;
- b) 18 birds per turbine per year at individual turbines or turbine groups;
- c) 0.2 raptors per turbine per year (all raptors) across the Facility;
- d) 0.1 raptors per turbine per year (raptors of provincial conservation concern) across the Facility;
- e) 10 or more birds at any one turbine during a single monitoring survey; or
- f) 33 or more birds (including raptors) at multiple turbines during a single monitoring survey.

K6. The Company shall report mortality levels to the Ministry of Natural Resources for the first three (3) years following the commencement of operation of the Facility, on an annual basis and within three (3) months of the conclusion of the October mortality monitoring, with the exception of the following (threshold references are to the actual number of species observed in the field, prior to correction factors):

- a) where a single mortality monitoring event exceeds 10 or more birds at any one turbine or 33 or more birds (including raptors) at multiple turbines the mortality event shall be reported to the Ministry of Natural Resources within 48 hours of observation;
- b) 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 shall be reported to the Ministry of Natural Resources within 48 hours of observation;
- c) where operational mitigation is applied for bats, an additional three (3) years of effectiveness monitoring is required and the Company shall report mortality levels to the Ministry of Natural Resources for three (3) years following the commencement of such operational mitigation on an annual basis and within three (3) months of the conclusion of the October mortality monitoring;
- d) where operational mitigation is applied for birds, for turbines located outside 120 metres of bird significant wildlife habitat, two (2) years of subsequent mortality and effects monitoring is required for those turbines where a significant annual bird or raptor mortality threshold is exceeded and the Company shall report mortality levels to the Ministry of Natural Resources for two (2) years following the observance of any such exceedance on an annual basis and within three (3) months of the conclusion of the October mortality monitoring.

- f) where operational mitigation is applied for birds, for turbines located within 120 metres of bird significant wildlife habitat, three (3) years of effectiveness monitoring for those turbines where the exceedances were observed is required. The Company shall report effectiveness monitoring results to the Ministry of Natural Resources for up to three (3) years following the observance of any such exceedance, on an annual basis and within three (3) months of the conclusion of the effectiveness monitoring.

OPERATIONAL MITIGATION

- K7. Operational mitigation measures shall be consistent with those identified in the “Bats and Bat Habitats: Guidelines for Wind Power Projects” dated March 2010, and available from the Ministry of Natural Resources, and shall include some or all of the following mitigation measures:
- a) increasing cut-in speed to 5.5 m/s or feathering 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
 - b) other mitigation measures described in an amended version of the “Bats and Bat Habitats: Guidelines for Wind Power Projects”; or
 - c) where an agreement between the Company and the Ministry of Natural Resources can be reached, an alternate operation mitigation plan agreed to between the Company and the Ministry of Natural Resources.
- K8. Where annual mortality levels exceed 18 birds/turbine/year at individual turbines or turbine groups or 0.2 raptors or vultures/turbine/year across the Facility or 0.1 raptors of provincial conservation concern/turbine/year across the Facility, the Company shall contact the Ministry of Natural Resources to initiate an appropriate response plan that shall include some or all of the following mitigation measures:
- a) increased reporting frequency to identify potential threshold exceedance;
 - b) additional behavioural studies to determine factors affecting mortality rates;
 - c) periodic shut-down of select turbines;
 - d) blade feathering at specific times of year; or
 - e) an alternate plan agreed to between the Company and the Ministry of Natural Resources.

L - TRAFFIC MANAGEMENT PLANNING

- L1. Within three (3) months of receiving this Approval, the Company shall prepare a Traffic Management Plan and provide it to the Municipality of Haldimand County.
- L2. Within three (3) months of having provided the Traffic Management Plan to the Municipality of Haldimand County, the Company shall make reasonable efforts to enter into a Road Users Agreement with the Municipality of Haldimand County.

L3. If a Road Users Agreement has not been signed with the Municipality of Haldimand County within three (3) months of having provided the Traffic Management Plan to the Municipality of Haldimand County, the Company shall provide a written explanation to the Director as to why this has not occurred.

M - ARCHAEOLOGICAL RESOURCES

M1. The Company shall implement all of the recommendations, if any, for further archaeological fieldwork and for the protection of archaeological sites found in the consultant archaeologist's report included in the Application, and which the Company submitted to the Ministry of Tourism, Culture and Sport in order to comply with clause 22 (2) (b) of O. Reg. 359/09.

M2. Should any previously undocumented archaeological resources be discovered, the Company shall:

- (1) cease all alteration of the area in which the resources were discovered immediately;
- (2) engage a consultant archaeologist to carry out the archaeological fieldwork necessary to further assess the area and to either protect and avoid or excavate any sites in the area in accordance with the *Ontario Heritage Act*, the regulations under that act and the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists*; and
- (3) notify the Director as soon as reasonably possible.

N - COMMUNITY LIAISON COMMITTEE

N1. Within three (3) months of receiving this Approval, the Company shall make reasonable efforts to establish a Community Liaison Committee. The Community Liaison Committee shall be a forum to exchange ideas and share concerns with interested residents and members of the public. The Community Liaison Committee shall be established by:

- (1) publishing a notice in a newspaper with general circulation in each local municipality in which the project location is situated; and
- (2) posting a notice on the Company's publicly accessible website, if the Company has a website; to notify members of the public about the proposal for a Community Liaison Committee and invite residents living within a one (1) kilometer radius of the Facility that may have an interest in the Facility to participate on the Community Liaison Committee.

N2. The Company may invite other members of stakeholders to participate in the Community Liaison Committee, including, but not limited to, local municipalities, local conservation authorities, Aboriginal communities, federal or provincial agencies, and local community groups.

N3. The Community Liaison Committee shall consist of at least one Company representative who shall attend all meetings.

N4. The purpose of the Community Liaison Committee shall be to:

- (1) act as a liaison facilitating two way communications between the Company and members of the public with respect to issues relating to the construction, installation, use, operation, maintenance and retirement of the Facility;
 - (2) provide a forum for the Company to provide regular updates on, and to discuss issues or concerns relating to, the construction, installation, use, operation, maintenance and retirement of the Facility with members of the public; and
 - (3) ensure that any issues or concerns resulting from the construction, installation, use, operation, maintenance and retirement of the Facility are discussed and communicated to the Company.
- N5. The Community Liaison Committee shall be deemed to be established on the day the Director is provided with written notice from the Company that representative Community Liaison Committee members have been chosen and a date for a first Community Liaison Committee meeting has been set.
- N6. If a Community Liaison Committee has not been established within three (3) months of receiving this Approval, the Company shall provide a written explanation to the Director as to why this has not occurred.
- N7. The Company shall ensure that the Community Liaison Committee operates for a minimum period of two (2) years from the day it is established. During this two (2) year period, the Company shall ensure that the Community Liaison Committee meets a minimum of two (2) times per year. At the end of this two (2) year period, the Company shall contact the Director to discuss the continued operation of the Community Liaison Committee.
- N8. The Company shall ensure that all Community Liaison Committee meetings are open to the general public.
- N9. The Company shall provide administrative support for the Community Liaison Committee including, at a minimum:
- (1) providing a meeting space for Community Liaison Committee meetings;
 - (2) providing access to resources, such as a photocopier, stationery, and office supplies, so that the Community Liaison Committee can:
 - (a) prepare and distribute meeting notices;
 - (b) record and distribute minutes of each meeting; and
 - (c) prepare reports about the Community Liaison Committee's activities.
- N10. The Company shall submit any reports of the Community Liaison Committee to the Director and post it on the Company's publicly accessible website, if the Company has a website.

O - OPERATION AND MAINTENANCE

- O1. Prior to the commencement of the operation of the Facility, the Company shall prepare a written manual for use by Company staff outlining the operating procedures and a maintenance program for the Equipment that includes as a minimum the following:
- (1) routine operating and maintenance procedures in accordance with good engineering practices and as recommended by the Equipment suppliers;
 - (2) emergency procedures;
 - (3) procedures for any record keeping activities relating to operation and maintenance of the Equipment; and
 - (4) all appropriate measures to minimize noise emissions from the Equipment.
- O2. The Company shall;
- (1) update, as required, the manual described in Condition O1; and
 - (2) make the manual described in Condition O1 available for review by the Ministry upon request.
- O3. The Company shall ensure that the Facility is operated and maintained in accordance with the Approval and the manual described in Condition O1.

P - RECORD CREATION AND RETENTION

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

Q - NOTIFICATION OF COMPLAINTS

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

R - CHANGE OF OWNERSHIP

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

S - ABORIGINAL CONSULTATION

- S1. The Company shall maintain communications with interested Aboriginal communities during the construction, installation, operation, use, and retiring of the facility.
- S2. The Company shall fulfil all commitments made to Aboriginal communities during the construction, installation, and operation of the Facility, including but not limited to, providing the following to interested Aboriginal communities that have requested or may request it:
- (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, and operation phases of the Facility, including notice of the commencement of construction activities at the project location.
- S3. If an interested Aboriginal community requests a meeting to obtain non-confidential information relating to the construction, installation, and operation of the Facility, the Company shall use reasonable efforts to arrange and participate in such a meeting.
- S4. If any archaeological resources of Aboriginal origin are found during the construction of the Facility, the Company shall:

- (1) notify the Six Nations of the Grand River and the Mississaugas of the New Credit and any other Aboriginal community considered likely to be interested or which has expressed an interest in such finds; and,
 - (2) arrange and participate in any meeting requested by an interested Aboriginal community to discuss the archaeological find(s) and/or the use of Aboriginal archaeological liaisons.
- S5. The Company shall maintain records of communication with interested Aboriginal communities and make these records available for review by the Ministry upon request.

SCHEDULE A

Facility Description

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

- (a) sixty five (65) SWT-2.221-101 wind turbine generators each rated at 2.221 megawatts generating output capacity
- (b) two (2) SWT-2.126-101 wind turbine generators each rated at 2.126 megawatts generating output capacity

with a total name plate capacity of 148.6 megawatts, designated as source ID Nos T1 – T30 and T33 –T69, each with a hub height of 99.5 metres above grade, and sited at the locations shown in Schedule B; and

- (c) associated ancillary equipment, systems and technologies including one 166 megawatt transformer substation, on-site access roads, underground cabling and overhead distribution lines,

all in accordance with the Application.

SCHEDULE B

Coordinates of the Equipment and Noise Specifications

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

	Source ID	Sound Power Level (dBA)	Easting (m)	Northing (m)	Source Description
1	T1	105	607,287	4,746,785	SWT-2.221-101
2	T2	105	605,035	4,746,639	SWT-2.221-101
3	T3	105	606,942	4,746,830	SWT-2.221-101
4	T4	105	604,861	4,746,993	SWT-2.221-101
5	T5	105	602,757	4,745,791	SWT-2.221-101
6	T6	105	606,513	4,747,319	SWT-2.221-101
7	T7	105	608,495	4,747,949	SWT-2.221-101
8	T8	105	607,477	4,747,512	SWT-2.221-101
9	T9	105	600,290	4,745,005	SWT-2.221-101
10	T10	104	593,994	4,748,442	SWT-2.126-101
11	T11	105	603,472	4,748,075	SWT-2.221-101
12	T12	105	601,479	4,747,111	SWT-2.221-101
13	T13	105	594,663	4,751,618	SWT-2.221-101
14	T14	105	603,952	4,750,047	SWT-2.221-101
15	T15	105	608,232	4,749,798	SWT-2.221-101
16	T16	105	594,352	4,749,960	SWT-2.221-101
17	T17	105	598,648	4,747,922	SWT-2.221-101
18	T18	105	587,941	4,753,452	SWT-2.221-101
19	T19	105	606,366	4,749,368	SWT-2.221-101
20	T20	105	592,573	4,749,463	SWT-2.221-101
21	T21	105	602,692	4,746,290	SWT-2.221-101
22	T22	105	601,756	4,751,401	SWT-2.221-101
23	T23	105	591,178	4,751,634	SWT-2.221-101
24	T24	105	592,280	4,749,799	SWT-2.221-101
25	T25	105	599,133	4,750,265	SWT-2.221-101

SCHEDULE B

continued

	Source ID	Sound Power Level (dBA)	Easting (m)	Northing (m)	Source Description
26	T26	105	607,589	4,749,481	SWT-2.221-101
27	T27	105	598,999	4,748,313	SWT-2.221-101
28	T28	105	591,339	4,752,273	SWT-2.221-101
29	T29	105	599,967	4,750,467	SWT-2.221-101
30	T30	105	606,959	4,749,603	SWT-2.221-101
31	T33	105	589,588	4,755,581	SWT-2.221-101
32	T34	105	589,790	4,753,921	SWT-2.221-101
33	T35	105	602,880	4,749,652	SWT-2.221-101
34	T36	105	590,002	4,755,767	SWT-2.221-101
35	T37	105	602,481	4,749,039	SWT-2.221-101
36	T38	105	602,608	4,749,469	SWT-2.221-101
37	T39	105	603,875	4,749,401	SWT-2.221-101
38	T40	105	604,239	4,749,614	SWT-2.221-101
39	T41	105	590,395	4,753,879	SWT-2.221-101
40	T42	105	600,381	4,750,377	SWT-2.221-101
41	T43	105	588,466	4,752,970	SWT-2.221-101
42	T44	105	599,489	4,748,483	SWT-2.221-101
43	T45	105	590,085	4,753,880	SWT-2.221-101
44	T46	105	590,582	4,751,836	SWT-2.221-101
45	T47	105	604,740	4,750,499	SWT-2.221-101
46	T48	105	594,126	4,750,504	SWT-2.221-101
47	T49	105	608,750	4,749,784	SWT-2.221-101
48	T50	105	609,091	4,749,844	SWT-2.221-101
49	T51	105	601,762	4,745,085	SWT-2.221-101
50	T52	105	599,708	4,748,016	SWT-2.221-101
51	T53	105	600,301	4,748,359	SWT-2.221-101
52	T54	105	607,370	4,746,400	SWT-2.221-101
53	T55	105	600,136	4,746,677	SWT-2.221-101
54	T56	105	598,675	4,750,335	SWT-2.221-101
55	T57	105	606,650	4,751,283	SWT-2.221-101
56	T58	104	589,733	4,750,362	SWT-2.126-101

SCHEDULE B

continued

	Source ID	Sound Power Level (dBA)	Easting (m)	Northing (m)	Source Description
57	T59	105	614,355	4,748,118	SWT-2.221-101
58	T60	105	614,974	4,747,470	SWT-2.221-101
59	T61	105	614,326	4,747,732	SWT-2.221-101
60	T62	105	614,680	4,748,176	SWT-2.221-101
61	T63	105	614,750	4,747,811	SWT-2.221-101
62	T64	105	614,705	4,747,338	SWT-2.221-101
63	T65	105	611,480	4,747,403	SWT-2.221-101
64	T66	105	611,758	4,747,387	SWT-2.221-101
65	T67	105	612,236	4,747,633	SWT-2.221-101
66	T68	105	602,131	4,748,909	SWT-2.221-101
67	T69	105	606,923	4,747,368	SWT-2.221-101
68	TR300	85	596,520	4,749,103	Transformer: 166 MVA

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

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, A6 and A7 are included to ensure that final retirement of the Facility is completed in an aesthetically pleasing manner, in accordance with Ministry standards, and to ensure long-term protection of the health and safety of the public and the environment.
4. Condition A8 is included to require the Company to inform the Ministry of the commencement of activities related to the construction, installation and operation of the Facility.
5. Condition 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, F and G 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 H, I, J, K and L are included to ensure that the Facility is constructed, installed, used, operated, maintained and retired in a way that does not result in an Adverse Effect or hazard to the natural environment or any persons.
10. Condition M is included to protect archaeological resources that may be found at the project location.
11. Condition N is included to ensure continued communication between the Company and the local residents.

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

NOTICE REGARDING HEARINGS

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

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

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

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

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

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

This notice must be served upon:

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

AND

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

AND

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

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

Under Section 142.1 of the 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, 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 15th day of June, 2012



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

VS/

c: District Manager, MOE Hamilton - District
Mark Kozak, Stantec Consulting Ltd.