

# RENEWABLE ENERGY APPROVAL

NUMBER 2484-8RQUS4 Issue Date: March 16, 2012

Summerhaven Wind, LP

5500 North Service Rd, No. Suite 205

Burlington, Ontario

L7L 6W6

Project Location:

Concession Road 5 Lot 19-20, Concession 5

Haldimand County,

N0A 1J0

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

- the construction, installation, operation, use and retiring of:
- (a) fifty-eight (58) wind turbine generators, each rated at 2.221 megawatts generating output capacity with a total name plate capacity of 128.82 megawatts, designated as sources ID Nos. WTG-001, WTG-003 to WTG-028, WTG-30 to WTG-59, and WTG-61, each with a hub height of 80 metres above grade, and sited at the locations shown in Schedule A and as indicated in the supporting documentation submitted with the application;
- (b) one (1) transformer substation, rated at 140 megavolt-ampere, 34.5/241.5 kilovolts, with a total sound power level rating including cooling fans not exceeding 88 dBA, and sited at the location shown in Schedule A and as indicated in the supporting documentation submitted with the application; and
- (c) associated ancillary equipment, systems and technologies including on-site access roads, underground cabling and overhead distribution and transmission lines;

all in accordance with the application for a Renewable Energy Approval dated June 09, 2011, and signed by F. Allen Wiley, Vice President of Development, Summerhaven Wind LP, and all supporting documentation submitted with the application, including amended documentation submitted up to March 07, 2012.

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 NextEra Energy Canada ULC Summerhaven Wind Energy Centre Application for a Renewable Energy Approval Noise Study Report, dated August 2011, prepared by Golder Associates and signed by Samuel Isono, Acoustics, Noise and Vibration Engineer, Golder Associates, and includes additional correspondence submitted up to March 7, 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. "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;
- 7. "Act" means the *Environmental Protection Act*, R.S.O 1990, c.E.19, as amended;
- 8. "Adverse Effect" has the same meaning as in the Act;
- 9. "Application" means the application for a Renewable Energy Approval dated June 9, 2011, and signed by F. Allen Wiley, Vice President of Development, Summerhaven Wind LP, and all supporting documentation submitted with the application, including amended documentation submitted up to March 7, 2012;
- 10. "Approval" means this Renewable Energy Approval issued in accordance with Section 47.4 of the Act, including any schedules to it;

- 11. "A-weighting" means the frequency weighting characteristic as specified in the International Electrotechnical Commission (IEC) Standard 61672, and intended to approximate the relative sensitivity of the normal human ear to different frequencies (pitches) of sound. It is denoted as "A";
- 12. "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";
- 13. "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;"
- 14. "Class 2 Area" means an area with an acoustical environment that has qualities representative of both Class 1 and Class 3 Areas:
  - (a) sound levels characteristic of Class 1 during daytime (07:00 to 19:00 or to 23:00 hours);
  - (b) 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);
  - (c) no clearly audible sound from Stationary Sources other than from those under impact assessment.
- 15. "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:
  - (a) a small community with less than 1000 population;
  - (b) agricultural area;
  - (c) a rural recreational area such as a cottage or a resort area; or
  - (d) a wilderness area.
- 16. "Company" means Strathroy Wind GP Inc., as general partner for Summerhaven Wind LP, solely in connection with the conduct of business of that Limited Partnership, and includes its successors and assignees;
- 17. "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;
- 18. "Decibel" means a dimensionless measure of Sound Level or Sound Pressure Level, denoted as dB;
- 19. "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;

- 20. "District Manager" means the District Manager of the appropriate local district office of the Ministry where the Facility is geographically located;
- 21. "Equipment" means the fifty-eight (58) 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;
- 22. "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 Leq and is measured in dB A-weighting (dBA);
- 23. "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;
- 24. "IEC Standard 61400-11" means the International Standard IEC Standard 61400-11, Wind turbine generator systems Part 11: Acoustic noise measurement techniques, 2006;
- 25. "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;
- 26. "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;
- 27. "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;
- 28. "Noise Receptor" has the same meaning as in O. Reg. 359/09;
- 29. "O. Reg. 359/09" means Ontario Regulation 359/09 "Renewable Energy Approvals under Part V.0.1 of the Act" made under the Act;
- 30. "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;
- 31. "Sound Level" means the A-weighted Sound Pressure Level;
- 32. "Sound Level Limit" is the limiting value described in terms of the one hour A-weighted Equivalent Sound Level Leq;
- 33. "Sound Pressure" means the instantaneous difference between the actual pressure and the average or barometric pressure at a given location. The unit of measurement is the micro pascal (μPa);

- "Sound Pressure Level" means twenty times the logarithm to the base 10 of the ratio of the effective pressure ( $\mu$ Pa) of a sound to the reference pressure of 20  $\mu$ Pa;
- 35. "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.
- 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 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. No construction or installation activities shall be commenced at the project location unless the Company has received any required authorizations under the *Endangered Species Act*, 2007.

#### **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 No. B1.

## **C - NOISE PERFORMANCE LIMITS**

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

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

- (2) the Equipment is constructed and installed at either of the following locations:
  - a) at the locations identified in Schedule A of this Approval; or
  - b) at a location that does not vary by more than 10 metres from the locations identified in Schedule A of this Approval and provided that,
    - i) the Equipment will comply with Condition No. C1 (1); and
    - ii) all setback prohibitions established under O.Reg. 359/09 are complied with.
- C2. If the Company determines that some or all of the Equipment cannot be constructed in accordance with Condition No. 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 No. C1 (2).

C4. The locations identified in Table 5 of the Acoustic Assessment Report as "Receptor ID" numbers VPOR0001 to VPOR0231 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.

# **D - ACOUSTIC AUDIT - IMMISSION**

- D1. The Company shall carry out an Acoustic Audit Immission of the Sound Levels produced by the operation of the Equipment in accordance with the following:
  - (1) the acoustic audit measurements shall be undertaken in accordance with Part D of the Compliance Protocol for Wind Turbine Noise;
  - (2) the acoustic audit measurements shall be performed by an Independent Acoustical Consultant at three (3) different Points of Reception that have been selected using the following criteria:
    - (a) the Points of Reception should represent the location of the greatest predicted noise impact, i.e. the highest predicted Sound Level; and
    - (b) the Points of Reception should be located in the direction of prevailing winds from the Facility;
  - (3) the acoustic audit measurements shall be performed on two (2) separate occasions within a period of twelve (12) months that represent the lowest annual ambient Sound Levels, preferably:
    - (a) March and April, and
    - (b) October and November
- D2. 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 six (6) 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 twelve (12) 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.

# **E - ACOUSTIC AUDIT - EMISSION**

E1. The Company shall carry out an Acoustic Audit - Emission of the acoustic emissions produced by the operation of the wind turbine generators in accordance with the following:

- (1) the acoustic 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 any one of the wind turbine generators rated at 2.221 megawatts generating output capacity used in the Facility.
- E2. The Company shall submit to the District Manager and the Director an Acoustic Audit Report-Emission, prepared in accordance with Section 9 of the IEC Standard 61400-11 by an Independent Acoustical Consultant, no later than six (6) months after the commencement of the operation of the Facility.

## F - STORMWATER MANAGEMENT

F1. 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 outlined in the Application.

# G - SEWAGE WORKS OF THE TRANSFORMER SUBSTATION SPILL CONTAINMENT FACILITY

- G1. The Company shall design and construct a transformer substation spill containment facility which meets the following requirements:
  - (1) the spill containment area serving the transformer 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, 25-year return storm capacity for the stormwater drainage area around the transformer under normal operating conditions;
  - (2) the containment facility shall have an impervious concrete floor and walls 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:
  - (3) 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
  - (4) 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.) that allows for batch discharges or direct discharges and for proper implementation of the monitoring program described in Condition No. G4.
- G2. The Company shall:

- (1) as a minimum, check the oil detection system on a monthly basis and create a written record of the inspections;
- (2) ensure that the effluent is essentially free of floating and settle-able solids and does not contain oil or any other substance in amounts sufficient to create a visible film, sheen or foam on the receiving waters;
- (3) immediately identify and clean-up all losses of oil from the transformer;
- (4) upon identification of oil in the effluent pumpout, take immediate action to prevent the further occurrence of such loss; and
- (5) 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.
- G3. The Company shall use best efforts to 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>	Maximum Concentration Objective			
Oil and Grease	15mg/L			

- (1) notify the District Manager as soon as reasonably possible of any exceedance of the maximum concentration objective set out in the table above;
- (2) take immediate action to identify the cause of the exceedance; and
- (3) take immediate action to prevent further exceedances.
- G4. 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 analyse the required set of samples at the sampling points listed in the table below in accordance with the measurement frequency and sample type specified for the effluent parameter, oil and grease, and create a written record of the monitoring:

Effluent Parameters	Measurement Frequency and Sample Points	Sample Type
Oil and Grease	B – Batch, i.e., for each discrete volume in the sump	Grab

prior to pumpout; or Q – Quarterly for direct effluent discharge, i.e., four	
times over a year, relatively evenly spaced.	

- in the event of an exceedance of the maximum concentration objective set out in the table in Condition No. G3, the Company shall:
  - (a) increase the frequency of sampling to once per month, for each month that effluent discharge occurs, and
  - (b) provide the District Manager, on a monthly basis, with copies of the written record created for the monitoring until the District Manager provides written direction that monthly sampling and reporting is no longer required; and
- if over a period of twenty-four (24) months of effluent monitoring under Condition No. G4(1), there are no exceedances of the maximum concentration set out in the table in Condition No. G3, the Company may reduce the measurement frequency of effluent monitoring to a frequency as the District Manager may specify in writing, provided that the new specified frequency is never less than annual.
- G5. The Company shall comply with the following methods and protocols for any sampling, analysis and recording undertaken in accordance with Condition No. G4:
  - (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.

#### **H - WATER TAKING ACTIVITIES**

- H1. 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;
  - 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.

- H2. 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.
- H3. 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.

# I - BIRD AND BAT MONITORING

- 11. The Company shall implement its Post Construction Follow-up Plan submitted as part of the Application.
- I2. If the Company determines that it must deviate from its Post Construction Follow-up Plan, the Company shall contact the District Manager at the Guelph District Office of the Ministry of Natural Resources and the Director, prior to making any changes to the methodology in the Post Construction Follow-up Plan, and follow any directions provided.
- I3. The Company shall contact the District Manager at the Guelph District Office of the Ministry of Natural Resources and the Director if the mortality thresholds stated in its Post Construction Follow-up Plan are reached for either bird or bats.

#### J - TRAFFIC MANAGEMENT PLANNING

- J1. Within three (3) months of receiving this Approval, the Company shall prepare a Traffic Management Plan and provide it to Haldimand County.
- J2. Within three (3) months of having provided the Traffic Management Plan to Haldimand County, the Company shall make reasonable efforts to enter into a Road Users Agreement with Haldimand County.
- J4. If a Road Users Agreement has not been signed with Haldimand County within three (3) months of having provided the Traffic Management Plan to Haldimand County, the Company shall provide a written explanation to the Director as to why this has not occurred.

## K - ARCHAEOLOGICAL RESOURCES

- K1. 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 and Culture in order to comply with clause 22 (2) (b) of O. Reg. 359/09.
- K2. 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 and Culture's *Standards and Guidelines for Consultant Archaeologists*; and
  - (3) notify the Director as soon as reasonably possible.

# L - COMMUNITY LIAISON COMMITTEE

- L1. 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) kilometre radius of the Facility that may have an interest in the Facility to participate on the Community Liaison Committee.

- L2. 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.
- L3. The Community Liaison Committee shall consist of at least one Company representative who shall attend all meetings.
- L4. 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.
- L5. 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.
- L6. 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.
- L7. 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.
- L8. The Company shall ensure that all Community Liaison Committee meetings are open to the general public.
- L9. 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; and
  - (2) providing access to resources, such as a photocopier, stationary, 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.
- L10. 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.

## M - OPERATION AND MAINTENANCE

- M1. 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. including the sewage works of the transformer substation spill containment facility, 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) inspection programs including frequency of inspection and the methods or tests employed to detect when maintenance is necessary;
  - (3) repair and maintenance programs, including the frequency of repair and maintenance;
  - (4) emergency procedures;
  - (5) procedures for any record keeping activities relating to operation and maintenance of the Equipment, including the sewage works of the transformer spill containment facility;
  - (6) all appropriate measures to minimize noise emissions from the Equipment; and
  - (7) any additional information requested in writing by the District Manager from time to time.
- M2. The Company shall;
  - (1) update as required the manual described in Condition No. M1; and
  - (2) make the manual described in Condition No. M1 available for review by the Ministry upon request.
- M3. The Company shall ensure that the Facility is operated and maintained in accordance with the Approval and the manual described in Condition No. M1.

#### N - RECORD CREATION AND RETENTION

N1. 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 staff 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.
- N2. A record described under Condition No. N1(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 direction and wind speed 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.
- N3. The Company shall retain, for a minimum of five (5) years from the date of their creation, all records described in Condition No. N1 and N2, and make these records available for review by the Ministry upon request.

## O - NOTIFICATION OF COMPLAINTS

- O1. The Company shall notify the District Manager of each complaint within two (2) business days of the receipt of the complaint.
- O2. The Company shall provide the District Manager with the written records created under Condition No. N2 within eight (8) business days of the receipt of the complaint.

#### P - ABORIGINAL CONSULTATION

- P1. The Company shall maintain ongoing communications with interested Aboriginal communities during the construction, installation, and operation of the Facility.
- P2. 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 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.
- P3. If an interested Aboriginal community requests a meeting to obtain information relating to the construction, installation, and operation of the Facility, the Company shall use best efforts to arrange and participate in such a meeting.
- P4 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.
- P5 The Company shall coordinate with the Six Nations of the Grand River consultation team to assess anecdotal information that the team has gathered from Six Nations harvesters about any changes in deer behaviour during the construction, installation and operation of the Facility.

# Q - CHANGE OF OWNERSHIP

- Q1. The Company shall notify the Director in writing, and forward a copy of the notification to the District Manager, within thirty (30) days of the occurrence of any of the following changes:
  - (1) the ownership of the Facility;
  - (2) the operator of the Facility;
  - (3) the address of the Company;

- (4) the partners, where the Company is or at any time becomes a partnership and a copy of the most recent declaration filed under the Business Names Act, R.S.O. 1990, c.B.17, as amended, shall be included in the notification; and
- (5) the name of the corporation where the Company is or at any time becomes a corporation, other than a municipal corporation, and a copy of the most current information filed under the Corporations Information Act, R.S.O. 1990, c. C.39, as amended, shall be included in the notification.

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

## **REASONS**

- 1. Condition Nos. A1 and A2 are imposed 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. Condition Nos. A3 and A4 are included to require the Company to provide information to the public and the local municipality.
- 3. Condition Nos. 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. Conditions No. A7 is included to require the Company to provide information to the district Ministry of the Environment.
- 5. Condition No. A8 is included to ensure that the Company has the necessary permits under the *Endangered Species Act* prior to the commencement of construction.
- 6. Conditions B are intended to limit the time period of the Approval.
- 7. Conditions C 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 and 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 Ontario Regulation 359/09.
- 8. Conditions D and E 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 F, G, H, I, and J 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. Conditions K are included to protect archaeological resources that may be found at the project location.
- 11. Conditions L are include to ensure continued communication between the Company and the local residents.
- 12. Conditions M are included to emphasize that the Equipment must be maintained and operated according to a procedure that will result in compliance with the Act, the regulation and this Approval.
- 13. Conditions N are included to require the Company to keep records and provide information to staff of the Ministry so that compliance with the Act, the regulation and this Approval can be verified.
- 14. Conditions O are included to ensure that any complaints regarding the construction, installation, use, operation, maintenance, or retirement of the Facility are responded to in an efficient manner.
- 15. Conditions P are included to ensure continued communication between the Company and Aboriginal communities.
- 16. Condition Q is included to ensure that the Facility is operated under the corporate name which appears on the application form submitted for this Approval and to ensure that the Director is informed of any changes.

Schedule A

Coordinates of the Equipment

Wind Turbine	Generators: S	Siemens 2.221-101; 8	30 m towers		
ID Coordinates, UTM z17 NAD83		ID	Coordinates, UTM z17 NAD83		
	Easting, m	Northing, m		Easting, m	Northing, m
WTG-001	576124	4749873	WTG-032	590737	4746531
WTG-003	574742	4748226	WTG-033	594906	4747489
WTG-004	575685	4748309	WTG-034	588348	4744337
WTG-005	576990	4748661	WTG-035	588779	4744087
WTG-006	578518	4748834	WTG-036	589271	4744225
WTG-007	579869	4749156	WTG-037	589975	4744279
WTG-008	580947	4749341	WTG-038	591475	4744600
WTG-009	586015	4749711	WTG-039	591880	4745113
WTG-010	586837	4749912	WTG-040	592721	4744952
WTG-011	587326	4751141	WTG-041	593224	4745318
WTG-012	572316	4746292	WTG-042	593522	4745702
WTG-013	572920	4746475	WTG-043	594899	4745794
WTG-014	574224	4746586	WTG-044	596210	4746279
WTG-015	576150	4746799	WTG-045	596181	4745775
WTG-016	577821	4747047	WTG-046	597119	4745943
WTG-017	582468	4747896	WTG-047	597181	4746416
WTG-018	588422	4748589	WTG-048	590280	4742517
WTG-019	590644	4749342	WTG-049	590293	4742174
WTG-020	573903	4745199	WTG-050	590314	4741857
WTG-021	577726	4746477	WTG-051	592008	4742791
WTG-022	579685	4746426	WTG-052	593087	4743349
WTG-023	580952	4746798	WTG-053	593930	4743637
WTG-024	582973	4747085	WTG-054	595213	4744131
WTG-025	583914	4747307	WTG-055	596817	4743995
WTG-026	584940	4747269	WTG-056	597076	4743766
WTG-027	586761	4746915	WTG-057	579024	4749020
WTG-028	591259	4748123	WTG-058	584373	4748649
WTG-030	587383	4745469	WTG-059	577118	4747104
WTG-031	589357	4746128	WTG-061	577924	4745876
	Transfor	mer Substation		582616	4747537

#### NOTICE REGARDING HEARINGS

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

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

Section 142 of the <u>Environmental Protection Act</u> provides that the notice requiring the hearing shall state:

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

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

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

This notice must be served upon:

The Secretary\* The Environmental Commissioner The Director 1075 Bay Street, 6th Floor Section 47.5, Environmental Protection Act Environmental Review Tribunal 655 Bay Street, 15th Floor Suite 605 Ministry of the Environment Toronto, Ontario 2 St. Clair Avenue West, Floor 12A AND Toronto, Ontario AND M5G 1E5 M5S 2B1 Toronto, Ontario M4V 1L5

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

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

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

# DATED AT TORONTO this 16th day of March, 2012

Vic Schroter, P.Eng.

Director

Section 47.5, Environmental Protection Act

KR/

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