

## RENEWABLE ENERGY APPROVAL

NUMBER 7988-8AVKM5 Issue Date: November 10, 2010

Kent Breeze Corporation and MacLeod Windmill Project Inc.

c/o Suncor Energy Services Inc. 2489 North Sheridan Way Mississauga, Ontario

L5K 1A8

Site Location: Kent Breeze Wind Farms

Part Lots 8-11, Concession 1 Part Lots 4-6, Concession 1 & 2

Township of Camden

Chatham-Kent Municipality

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:
- eight (8) wind turbine generators each rated at 2.5 megawatts generating output capacity with a total name plate capacity of 20 megawatts, designated as source ID Nos. Kent 1, Kent 3, Kent 4, Kent 5, Macleod 1, Macleod 3, Macleod 4, and Macleod 5, each with a hub height of 85 metres above grade and subject to Condition No. 10 below and sited at the locations shown in Schedule A and as indicated in the supporting information submitted with the application; and
- (b) associated ancillary equipment, systems and technologies consisting of on-site access roads, crane pads, two self-contained electrical switching stations, and underground cabling to connect the switching stations and to connect directly to the existing Hydro One Networks Inc. overhead distribution lines.

all in accordance with the application for a Renewable Energy Approval dated May 13, 2010, and signed by Grant Arnold, Director of Suncor Energy Services Inc. on behalf of Kent Breeze Corporation and MacLeod Windmill Project Inc., and all supporting documentation submitted with the application, including amended documentation submitted up to November 1, 2010.

For the purpose of this Renewable Energy Approval, the following definitions apply:

- (1) "Act" means the *Environmental Protection Act*, R.S.O 1990, c.E.19, as amended;
- (2) "Adverse Effect" means one or more of the following:
  - (a) impairment of the quality of the natural environment for any use that can be made of it,
  - (b) injury or damage to property or to plant or animal life,
  - (c) harm or material discomfort to any person,
  - (d) an adverse effect on the health of any person,
  - (e) impairment of the safety of any person,
  - (f) rendering any property or plant or animal life unfit for human use,
  - (g) loss of enjoyment of normal use of property, and
  - (h) interference with the normal conduct of business;
- (3) "Application" means the application for a Renewable Energy Approval dated May 13, 2010, and signed by Grant Arnold, Director of Suncor Energy Services Inc. on behalf of Kent Breeze Corporation and MacLeod Windmill Project Inc., and all supporting documentation submitted with the application, including amended documentation submitted up to November 1, 2010;
- (4) "Approval" means this Renewable Energy Approval issued in accordance with Section 47.4 of the *Act*, including any schedules to it;
- (5) "A-weighting" means the frequency weighting characteristic as specified in the International Electrotechnical Commission (IEC) 123 or IEC 179 and intended to approximate the relative sensitivity of the normal human ear to different frequencies (pitches) of sound. It is denoted as "A";
- (6) "A-weighted Sound Pressure Level" means the Sound Pressure Level modified by application of the A-weighting. It is measured in decibels, A-weighted, and denoted "dBA";
- (7) "Company" means Kent Breeze Corporation and MacLeod Windmill Project Inc., and includes its successors and assignees;
- (8) "Decibel" means a dimensionless measure of sound level or Sound Pressure Level, it is denoted as dB;
- (9) "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*;
- (10) "District Manager" means the District Manager of the appropriate local district office of the *Ministry* where the *Facility* is geographically located;

- "Equipment" means the eight (8) wind turbine generators identified in this *Approval* and as further described in the *Application*, to the extent approved by this *Approval*;
- "Facility" means the renewable energy generation facility, including the *Equipment*, as described in this *Approval* and the *Application*, to the extent approved by this *Approval*;
- "Leq" means the equivalent sound level and is denoted Leq. It 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 measured in dB A-weighting (dBA);
- (14) "Ministry" means the Ontario Ministry of the Environment;
- "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;
- (16) "Sound Level Limit" is the limiting value described in terms of the one hourly *A-weighted* equivalent sound level denoted as  $L_{eq}$ .
- (17) "Sound Level" means the *A-weighted*, *Sound Pressure Level*.
- "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" is 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; and
- (20) "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

## **GENERAL**

- 1. 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*.
- 2. 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.

- 3. 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 the Municipality of Chatham-Kent along with the *Application*.
- 4. The *Company* shall ensure that the *Application* is posted on the *Company's* publicly accessible website within five (5) business days of receiving this *Approval*, if the *Company* has a website.
- 5. 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*.
- 6. The *Facility* shall be retired in accordance with the Decommissioning Plan Report and any directions provided by the *Director* or *District Manager*.

## **EXPIRY OF APPROVAL**

- 7. Construction and installation of the *Facility* must be completed within two (2) 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.
- 8. 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. 7.

## PERFORMANCE LIMITS

- 9. The *Company* shall ensure that:
  - (1) the sound levels from the *Equipment*, at the points of reception identified in Table 6.1 on pages 6-1 to 6-11 of the Noise Assessment Report dated May 14, 2010 and prepared by Hatch, comply with the limits set in the *Noise Guidelines for Wind Farms (October, 2008)*, 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
Wind Turbine Sound Level	40.0	40.0	40.0	43.0	45.0	49.0	51.0
Limits, dBA							

- (2) the *Equipment* is constructed and installed at either of the following locations:
  - a) the locations identified in Schedule A of this *Approval*; or
  - b) at a location that shall not exceed +/-10 metres from the locations identified in Schedule

A of this *Approval* and provided that the *Equipment* complies with all regulatory setback prohibitions and that no *Adverse Effect* will occur as a result of this variation.

# SETBACK REQUIREMENTS

- 10. Prior to the construction or installation of the *Equipment* the *Company* shall:
  - (1) submit one or more written reports to the *Director* verifying that the locations of the *Equipment* comply with Ontario Regulation 359/09 "Renewable Energy Approvals" under the *Act*; and
  - (2) obtain written confirmation from the *Director* verifying that the *Director* is satisfied with the report(s) prepared under Condition No. 10(1).
- 11. Within six (6) months of the completion of the construction of the *Facility*, the *Company* shall submit a written report to the *Director* verifying that the *Equipment* complies with the minimum setback distance of:
  - (1) 550 metres from the nearest noise receptor;
  - (2) 85 metres from property lines, unless an exception set out in Ontario Regulation 359/09 "Renewable Energy Approvals" under the *Act* applies; and
  - (3) 60 metres from all public road rights of way and railway rights of way.

#### STORMWATER MANAGEMENT

- 12. 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*.
- 13. Within six (6) months of completion of construction of the *Facility*, the *Company* shall provide the *District Manager* with a written description of post-construction stormwater management conditions.

## WATER TAKING ACTIVITIES

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

## **BIRD AND BAT MONITORING**

- 15. The *Company* shall implement its Environmental Effects Monitoring Plan for Birds and Bats submitted as part of the *Application*.
- 16. If the *Company* determines that it must deviate from its Environmental Effects Monitoring Plan for Birds and Bats, the *Company* shall contact the Planning Ecologist at the Aylmer District Office of the Ministry of Natural Resources and the *Director*, prior to making any changes to the methodology in the Environmental Effects Monitoring Plan for Birds and Bats, and follow any directions provided.

17. The *Company* shall contact the Planning Ecologist at the Aylmer District Office of the Ministry of Natural Resources and the *Director* if the mortality thresholds stated in its Environmental Effects Monitoring Plan for Birds and Bats are reached for either bird or bats.

#### TRAFFIC MANAGEMENT PLANNING

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

## ARCHAEOLOGICAL RESOURCES

21. If archaeological resources are discovered, the *Company* shall immediately contact any authorities it is legally obligated to contact, and shall notify the *Director* as soon as reasonably possible.

### OPERATION AND MAINTENANCE

- 22. Before construction and installation of the *Equipment*, 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*.
- 23. The *Company* shall;
  - (1) update as required the manual described in Condition No. 22; and
  - (2) make the manual described in Condition No. 22 available for review by staff of the *Ministry* upon request.
- 24. The *Company* shall ensure that the *Facility* is operated and maintained in accordance with the *Approval* and the manual described in Condition No. 22.

### RECORD CREATION AND RETENTION

- 25. 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*.
- 26. A record described under Condition No. 25(3) shall include:
  - (1) a description of the complaint including the date and time the complaint was made;
  - (2) a description, time and date of each incident to which the complaint relates;
  - (3) if the complaint was related to noise, wind direction at the time of the incident to which the complaint relates; and
  - (4) a description of the measures taken to address the cause of the incident to which the complaint relates and to prevent a similar occurrence in the future.
- 27. The *Company* shall retain, for a minimum of five (5) years from the date of their creation, all records described in Condition No. 25, and make these records available for review by staff of the Ministry upon request.

# NOTIFICATION OF COMPLAINTS

- 28. The *Company* shall notify the *District Manager* of each complaint within two (2) business days of the receipt of the complaint.
- 29. The Company shall provide the *District Manager* with the written records created under Condition No. 26 within five (5) business days of the receipt of the complaint.

### CHANGE OF OWNERSHIP

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

Corporations Information Act, R.S.O. 1990, c. C.39, as amended, shall be included in the notification.

#### SCHEDULE A

Coordinates of the *Equipment* are listed below in UTM17-NAD83 projection:

Equipment I.D.	Make and Madel	Coordinates, UTM (NAD 83 z17)			
	Make and Model	Easting (m)	Northing (m)		
Kent-1	GE 2.5xl	413230	4711135		
Kent-3	GE 2.5xl	412788	4709343		
Kent-4	GE 2.5xl	413679	4709641		
Kent-5	GE 2.5xl	414023	4710276		
Macleod-1	GE 2.5xl	414288	4710646		
Macleod-3	GE 2.5xl	415670	4710482		
Macleod-4	GE 2.5xl	415773	4711215		
Macleod-5	GE 2.5x1	415995	4712127		

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

#### **REASONS**

- 1. Condition Nos. 1 and 2 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. 3 and 4 are included to require the *Company* to provide information to the public and the local municipality.
- 3. Condition Nos. 5 and 6 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 Nos. 7 and 8 are intended to limit the time period of the *Approval*.
- 5. Condition No. 9 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 *Ministry's* Noise Guidelines for Wind Farms (2008).
- 6. Condition Nos. 10 and 11 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 Ontario Regulation 359/09 "Renewable Energy Approvals" under the *Act*.
- 7. Condition Nos. 12, 13, 14, 15, 16, 17, 18, 19, 20 and 21 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.
- 8. Condition Nos. 22, 23 and 24 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*.
- 9. Condition Nos. 25, 26 and 27 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
- 10. Condition Nos. 28 and 29 are 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.
- 11. Condition No. 30 is included to ensure that the *Facility* is operated under the corporate name which appears on the application form submitted for this *Approval* and to ensure that the *Director* is informed of any changes.

## NOTICE REGARDING HEARINGS

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

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

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

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

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

- 3. The name of the appellant;
- 4. The address of the appellant;
- 5. The renewable energy approval number;
- 6. The date of the renewable energy approval;
- 7. The name of the Director;

8. The municipality or municipalities within which the project is to be engaged in;

This notice must be served upon:

The Secretary\* The Environmental Commissioner The Director

M5S 2B1

Environmental Review Tribunal 1075 Bay Street, 6th Floor Section 47.5, Environmental Protection Act

655 Bay Street, 15th Floor Suite 605 Ministry of the Environment

Toronto, Ontario AND Toronto, Ontario AND 2 St. Clair Avenue West, Floor 12A

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 10th day of November, 2010

Mansoor Mahmood, P.Eng.

Director

KR/

M5G 1E5

c: District Manager, MOE Windsor Derek Dudek, IBI Group