

#### Conservation

Environmental Stewardship Division
Environmental Assessment and Licensing Branch
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FAXED

**CLIENT FILE NO.: 5445.00** 

Sean Fairfield
Manager – Environmental Planning
Algonquin Power
2845 Bristol Circle
Oakville ON L6H 7H7

May 14, 2010

Dear Mr. Fairfield:

Environment Act to St. Leon II Wind Energy LP for the construction, operation and maintenance of the Development known as the St. Leon II Wind Energy Project being a commercial wind energy facility with an annual average electrical output between 66 and 99 megawatts (MW) located in the Rural Municipalities of Lorne and Pembina and situated in three main areas; northeast of Hubbell, MB; south of St. Leon, MB and in the vicinity of Kingsley, MB. The Development involves the installation of between 30 and 70 wind turbine generators and associated infrastructure including access roads and an underground electrical collector system, in accordance with the Proposal filed under The Environment Act on February 1, 2010.

In addition to the enclosed Licence requirements, please be informed that all other applicable federal, provincial and municipal regulations and by-laws must be complied with.

For further information on the administration and application of the Licence, please feel free to contact Bryan Blunt, Senior Environment Officer, at (204) 945-7085.

Pursuant to Section 27 of The Environment Act, this licensing decision may be appealed by any person who is affected by the issuance of this Licence to the Minister of Conservation within 30 days of the date of the Licence.

Yours truly,

Tracey Braun, M. Sc.

Tracy Brown

Director

**Environment Act** 

c. D. Labossiere, Director, Environmental Operations Public Registries

NOTE:

Confirmation of Receipt of this Licence No. 2922 (by the Licencee only) is required by the Director of Environmental Assessment & Licensing. Please acknowledge receipt by signing in the space provided below and faxing a copy (cover letter only) back to the Department by May 28, 2010.

# THE ENVIRONMENT ACT LOI SUR L'ENVIRONNEMENT



### LICENCE

Licence No. / Licence n°	2922
Issue Date / Date de délivrance	May 14, 2010

In accordance with The Environment Act (C.C.S.M. c. E125) / Conformément à la Loi sur l'environnement (C.P.L.M. c. E125)

Pursuant to Section 11(1) / Conformément au Paragraphe 11(1)

THIS LICENCE IS ISSUED TO: / CETTE LICENCE EST DONNÉE À:

#### St. Leon II Wind Energy LP.: "the Licencee"

for the construction, operation and maintenance of the Development known as the St. Leon II Wind Energy Project being a commercial wind energy facility with an annual average electrical output between 66 and 99 megawatts (MW) located in the Rural Municipalities of Lorne and Pembina and situated in three main areas; northeast of Hubbell, MB; south of St. Leon, MB and in the vicinity of Kingsley, MB. The Development involves the installation of between 30 and 70 wind turbine generators and associated infrastructure including access roads and an underground electrical collector system, in accordance with the Proposal filed under The Environment Act on February 1, 2010, and subject to the following specifications, limits, terms and conditions:

#### **DEFINITIONS**

In this Licence:

"Director" means an employee of the department appointed as such by the Minister;

"dry" condition means some standing water may be present within a stream bed without detectable flow.

"Environment Officer" means an employee of the department appointed as such by the Minister;

"noise" means unwanted or undesirable sound;

"point of reception" means any point on the premises of a person where sound originating from other than those premises is received;

"WTG" means wind turbine generator.

\*\*A COPY OF THIS LICENCE AND THE ST. LEON II WIND ENERGY PROJECT ENVIRONMENTAL PROTECTION PLAN MUST BE KEPT ON SITE AT THE DEVELOPMENT AT ALL TIMES\*\*

#### GENERAL TERMS AND CONDITIONS

This Section of the Licence contains requirements intended to provide guidance to the Licencee in implementing practices to ensure that the environment is maintained in such a manner as to sustain a high quality of life, including social and economic development, recreation and leisure for present and future Manitobans.

- 1. The Licencee shall site wind turbine generators throughout the Development in consideration of the Canadian Wind Energy Association (CanWEA) Best Practice Guidelines for Sound and any local by-law respecting the siting of wind turbine generators.
- 2. The Licencee shall locate fuel storage and equipment servicing areas established for the construction and operation of the Development:
  - a) a minimum distance of 100 metres away from any waterbody; and
  - b) operate the fuel storage areas in compliance with the requirements of *Manitoba Regulation 188/2001* respecting *Storage and Handling of Petroleum Products and Allied Products*, or any future amendment thereof.
- 3. The Licencee shall, at all times during the construction of the Development, have materials available at the construction sites to contain and recover spills of fuel and other fluids associated with construction machinery. Spills of hazardous materials shall be removed immediately and disposed of at an approved facility.
- 4. The Licencee shall during construction and operation of the Development:
  - a) immediately report any reportable spills to Manitoba Conservation's Accident Reporting Line at (204) 944-4888 pursuant to *Manitoba Regulation 439/87* respecting *Environmental Accident Reporting*, or any future amendment thereof; and
  - b) at the request of the Director, provide a follow-up report to the Director on a reportable environmental accident outlining the cause(s) and proposed corrective action to prevent reoccurrence.
- 5. The Licencee shall dispose of non-reusable demolition and construction debris from the Development at a waste disposal ground operating under the authority of a permit pursuant to *Manitoba Regulation 150/91* respecting *Waste Disposal Grounds*, or any future amendment thereof, or a Licence pursuant to The Environment Act.
- 6. The Licencee shall, during construction, dispose of all wastewater from on-site sanitary facilities in accordance with *Manitoba Regulation 83/2003* respecting *Onsite Wastewater Management Systems*, or any future amendment thereof.
- 7. The Licencee shall, during construction, adhere to the general recommendations on design, construction and maintenance of stream crossings as specified in the Manitoba Natural Resources and Fisheries and Oceans Canada guidelines titled

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## Manitoba Stream Crossing Guidelines for the Protection of Fish and Fish Habitat, 1996.

8. The Licencee shall, within six months of completion of construction, file with the Director two sets of "As Constructed" drawings which show the location of the wind turbine generators and associated infrastructure in relation to topographical features within the project area.

#### SPECIFICATIONS, LIMITS, TERMS AND CONDITIONS

#### Respecting Pre-Construction

- 9. The Licencee shall, prior to the commencement of construction activities related to the Development, file a St. Leon II Wind Energy Project Environmental Protection Plan (EPP) for the approval of the Director. The EPP shall describe the integrated approach to be used by the Licencee to monitor the effects of construction activities and related environmental conditions both during and after construction to ensure that mitigative measures are applied systematically and in a manner consistent with the commitments made in the St. Leon II Wind Energy Project Environmental Impact Assessment, October 30, 2009.
- 10. The Licencee shall, prior to construction, provide a copy of this Licence and the St. Leon II Wind Energy Environment Protection Plan, to the contractor and subcontractor(s) involved in the Development.
- 11. The Licence shall, prior to construction, prepare a detailed noise assessment report for the approval of the Director. The noise assessment shall be undertaken in consideration of the Canadian Wind Energy Association (CanWEA) Best Practice Guidelines for Sound and any local by-law respecting the siting of wind turbine generators. The Report shall include isocontour maps indicating the location of the proposed WTGs, points of reception (residential dwellings) and participating receptors (project participants dwellings).
- 12. The Licencee shall retain a qualified on-site field biologist to:
  - a) conduct a reconnaissance level investigation, prior to construction, to identify potential impacts to bird breeding areas;
  - b) ensure that, during construction, impacts to bird breeding areas, wildlife and rare or endangered vegetation are avoided or minimized, and
  - c) monitor the work activity to ensure that all the environmental practices outlined in the Environment Act Proposal and Environmental Protection Plan (pursuant to Clause 9 of this licence) are carried out.
- 13. The Licencee shall, prior to construction, consult with staff of the Manitoba Water Stewardship's Fisheries Branch, Department of Fisheries and Oceans, Environment Canada and the field biologist to determine:

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- a) site specific impact management practices;
- b) buffer zones for water bodies and sensitive habitat; and
- c) the locations, preferred methods, and construction timing for access road waterway crossings.
- 14. The Licencee shall avoid locating electrical underground power cables associated with the electrical collection system near or through wetlands.
- 15. The Licencee shall avoid locating wind turbine generator structures closer than 200 meters from the riparian or functional edge of any Class 3 -5 wetlands. Any setbacks less than 200 meters from Class 3-5 wetlands shall be determined in consultation with the Wildlife and Ecosystem Protection Branch and the Environment Canada.
- 16. The Licencee shall, prior to construction, obtain a Water Rights Act Licence for any water control works and dewatering required during construction.

#### **Respecting Construction**

- 17. The Licencee shall, not less than two weeks prior to beginning construction of the Development, provide notification to the Environment Officer responsible for the administration of this Licence of the intended starting date of construction and the name(s) of the contractor(s) responsible for the construction.
- 18. The Licencee shall separate and replace topsoil from backhoe and trenching operations in accordance with the methodology described in Figures 1, 2 and 3 attached to this Licence. This requirement is not applicable where the topsoil has been previously disturbed due to the construction of roads or drains.
- 19. The Licencee shall, during construction, avoid clearing, compacting, grading or filling any agricultural lands, yard sites and natural habitat areas, which are not required for the Development. All construction related traffic shall be restricted to the access roads and marshalling yards throughout the Development.
- 20. The Licencee shall, where necessary, construct underground electrical and communication cables across flowing waterways by augering, tunneling or boring. Open cut crossings on flowing waterways shall not be made unless prior consultation has occurred with Manitoba Water Stewardship Fisheries Branch and with Fisheries and Oceans Canada. Dry or non-flowing natural and artificial waterways may be crossed with open cut techniques where approval has been obtained from the authority responsible for the channel.

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- 21. The Licencee shall, during construction activities near surface waters throughout the Development:
  - a) avoid altering surface drainage patterns;
  - b) locate any temporary marshalling yards and storage sites required for the Development a minimum distance of 100 meters from any water body;
  - avoid construction activities on native grasslands, and the edges of water bodies between April 15 and July 31, unless prior consultation has occurred with Manitoba Conservation Wildlife and Ecosystem Branch and Environment Canada;
  - d) avoid instream construction between April 1 and June 15; unless prior consultation has occurred with Manitoba Water Stewardship and Fisheries and Oceans Canada;
  - e) maintain a 15 meter buffer of undisturbed native vegetation for land located adjacent to first and second order drains, unless prior consultation has occurred with Manitoba Water Stewardship; and
  - f) maintain a 30 meter buffer of undisturbed native vegetation for lands located adjacent to third and higher order drains and waterbodies, unless prior consultation has occurred with Manitoba Water Stewardship.
- 22. The Licencee shall, during construction, undertake temporary erosion control measures to reduce siltation from erosion prone areas. Erosion prone areas shall be monitored following construction to ensure stabilization procedures are effective.
- 23. The Licencee shall obtain water required for dust control during construction from a source other than waste water treatment facilities.
- 24. The Licencee shall, at the completion of the construction of the Development:
  - a) landscape and vegetate erosion prone areas disturbed during the construction; and
  - b) fill and seal any boreholes and test pits to prevent groundwater contamination.

#### **Respecting Operation**

- 25. The Licencee shall, following the first full year of operation of the completed Development, file a copy of a one year post construction migratory bird and bat mortality study report with the Director. The post construction monitoring study shall be developed in consultation with Manitoba Conservation Wildlife and Ecosystem Protection Branch and Environment Canada and in accordance with Environment Canada's searcher efficiency and scavenger trial protocols. The post construction monitoring study shall include:
  - a) mortality monitoring for birds and bats at selected turbines during April-June and September-October for a period of one year, and
    - b) mortality monitoring for bats at selected turbines during August-September for a period of one year.
- 26. The Licencee shall, as required by an Environment Officer, retain a qualified consultant to develop a methodology to assist the Licencee to carry out noise

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monitoring at the point of reception. If noise levels are found to exceed the CanWEA Best Practice Guidelines for Sound, the Licencee shall submit a report to the Director outlining mitigation measures within 60 days of the date of monitoring.

#### Respecting Alterations to the Development

27. The Licencee shall obtain approval from the Director for any proposed alteration to the Development before proceeding with the alteration.

#### **REVIEW AND REVOCATION**

- A. If, in the opinion of the Director, the Licencee has exceeded or is exceeding or has or is failing to meet the specifications, limits, terms, or conditions set out in this Licence, the Director may, temporarily or permanently, revoke this Licence.
- B. If, in the opinion of the Director, new evidence warrants a change in the specifications, limits, terms or conditions of this Licence, the Director may require the filing of a new proposal pursuant to Section 11 of The Environment Act.
- C. If the construction of the Development has not commenced within three years of the date of this Licence, the Licence is revoked.

Tracey Braun, M. Sc.

Trace Seven

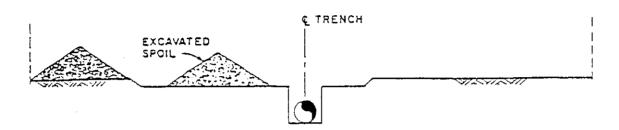
Director

**Environment Act** 

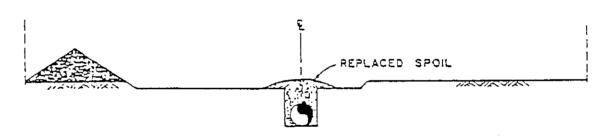
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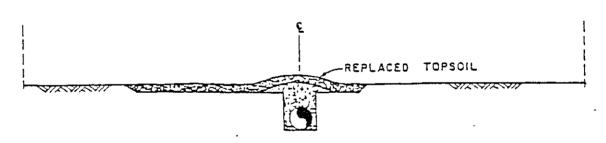
#### I. TOPSOIL STRIPPED



#### 2. TRENCH EXCAVATED



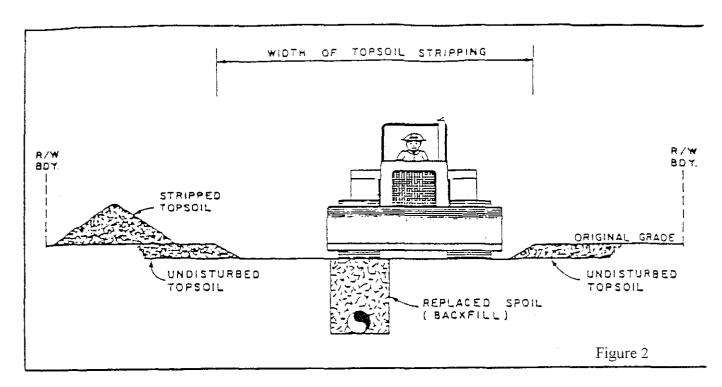
#### 3. TRENCH BACKFILLED



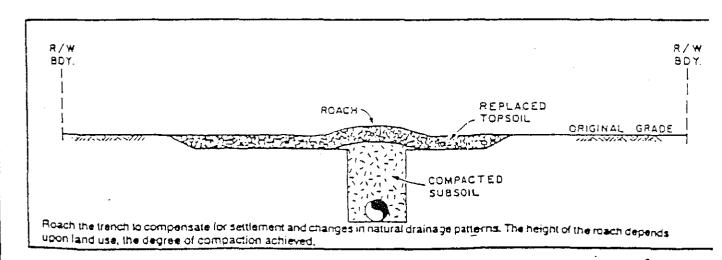
#### 4. TOPSOIL REPLACED

SEQUENCE OF TOPSOIL HANDLING

Figure 1



#### COMPACTION OF BACKFILL



ROACHING THE TRENCH

Figure 3