# **Environmental Assessment Approval**

Approval Date: Original Dated May 19, 2006

### **Canso Wind Farm**

# **Barrington Wind Energy Ltd., Proponent**

Canso, Guysborough County, Nova Scotia

The Canso Wind Farm (the "Undertaking"), proposed by Barrington Wind Energy Ltd. (the "Proponent"), Canso, Guysborough County, is approved pursuant to Section 13(1)(b). This Approval is subject to the following conditions and obtaining all other necessary approvals, permits or authorizations required by municipal, provincial and federal acts, regulations, bylaws, guidelines, policies or standards before commencing work on the Undertaking. It is the responsibility of the Proponent to ensure that all such approvals, permits or authorizations are obtained before commencing work on the Undertaking.

This Environmental Assessment Approval is based upon the review of the conceptual design, environmental baseline information, impact predictions, and mitigation presented in the Registration Information.

#### **Terms and Conditions for Environmental Assessment Approval**

### 1.0 General Approval

- 1.1 The Environmental Assessment Approval for the project is limited to the project as described in the Registration Document. Any proposal by the Proponent for expansion, modification or relocation of any aspect of the project from that proposed in the registration document must be submitted to the Environmental Assessment Branch for review and may require an environmental assessment.
- 1.2 The Proponent shall within 2 years of the date of issuance of this approval commence work on the Undertaking unless granted a written extension by the Minister.
- 1.3 The Proponent shall not transfer, sell, lease, assign or otherwise dispose of this approval without the written consent of the Minister. The sale of a controlling interest of a business or a transfer of an approval from a parent company to a subsidiary or an affiliate is deemed to be a transfer requiring consent.
- 1.4 The Proponent shall implement all mitigation and commitments in the Registration Document, unless approved otherwise by NSEL.

#### 2.0 Birds

- 2.1 The Proponent must submit, for review and approval by NSEL, the final site design, including a justification for turbine site selections, particularly as they relate to proximity to receptors. Plans must be submitted prior to construction, and include, but not be limited to:
  - a) Noise
  - b) Visual effects
  - c) Impacts to birds and bats
  - d) Accidents and malfunctions
  - e) Ground disturbance as it relates to erosion and sedimentation
- 2.2 The Proponent must prepare, within six months of approval, an Environmental Effects Monitoring program, in consultation with NSEL, NSDNR and the Canadian Wildlife Service (CWS) including but not limited to:
  - A program to monitor impacts to birds over a period of one year. Based on the results of monitoring programs, the Proponent shall make necessary modifications to mitigation plans and/or wind farm operations to prevent continued unacceptable environmental effects to the satisfaction of NSEL, based on consultation with NSDNR Wildlife Division and CWS.
  - Mitigation measures such as clearing vegetation outside the bird breeding season, identifying nesting activity prior to clearing, installing bird deterrents on transmission lines, appropriate revegetation, and minimum aviation lighting

#### 3.0 Bats

- 3.1 The Proponent must prepare, within six months of approval, an Environmental Effects Monitoring program, in consultation with NSEL, NSDNR and the Canadian Wildlife Service (CWS) including but not limited to:
  - A program to monitor impacts to bats over a period of one year. Based on the results of monitoring programs, the Proponent shall make necessary modifications to mitigation plans and/or wind farm operations to prevent continued unacceptable environmental effects to the satisfaction of NSEL, based on consultation with NSDNR Wildlife Division.

#### 4.0 Proximity to Residents

- 4.1 The Proponent must submit, for review and approval by NSEL, the final site design, including a justification for turbine site selections, particularly as they relate to proximity to receptors. Plans must be submitted prior to construction, and include, but not be limited to:
  - a) Noise

- b) Visual effects
- c) Impacts to birds and bats
- d) Accidents and malfunctions
- e) Ground disturbance as it relates to erosion and sedimentation

### 5.0 Noise and Visual Impact:

- 5.1 The Proponent must prepare, within six months of approval, an Environmental Effects Monitoring program, in consultation with NSEL, including but not limited to:
  - Details of noise monitoring programs. Based on the results of the monitoring programs, the Proponent must make necessary modifications to mitigation plans and/or wind farm operations to prevent continued unacceptable environmental effects to the satisfaction of NSEL.

#### 6.0 Wetlands

- 6.1 The Proponent must prepare, within six months of approval, an Environmental Effects Monitoring program, in consultation with NSEL, NSDNR and the Canadian Wildlife Service (CWS) including but not limited to:
  - A wetland monitoring program to identify vegetation community changes/hydrological regime, additional ATV use, invasive plant species and noxious weed surveys. Wetland survey plots will be delineated in the pre-development stage for purposes of monitoring changes in vegetation through the time that may result as the project proceeds.

#### 7.0 Air Quality

7.1 Dust generated by truck movement on site shall be minimized via speed control, proper truck loading and covered loads, application of approved dust suppressants, proper construction of onsite roads, appropriate rehabilitation planning (including windscreens), and/or other means as required by NSEL.

### 8.0 Ground & Surface Water Resources

- 8.1 The Proponent must prepare, within six months of approval, an Environmental Effects Monitoring program, in consultation with NSEL, NSDNR and the Canadian Wildlife Service (CWS) including but not limited to:
  - A geological survey, including the collection of samples to reveal whether there is potentially acid rock drainage (ARD) producing slate present in the project footprint. If there is rock with ARD potential, and avoidance of the rock is not possible, the rock will be treated according to the Sulphide Bearing Material Disposal Regulations. The Proponent will perform a site visit, after an appropriate time, to search for any indications of acid rock drainage, to ensure that the mitigation measures were sufficient.
- 8.2 The Proponent must prepare, within six months of approval, an Environmental Protection Plan, in consultation with NSEL, including but not limited to:

- An erosion and sediment control plan, including monitoring its
  effectiveness. Based on the results of monitoring, the Proponent shall
  make necessary modifications to mitigation plans and/or wind farm
  operations to prevent continued unacceptable environmental effects to
  the satisfaction of NSEL.
- 8.3 Mitigation and monitoring plans must include distance to the nearest water wells to appropriately assess the risk. If there are wells in the vicinity of the project then pre-blast surveys must be completed (within 800m).

#### 9.0 Public Consultation

9.1 At the request of NSEL, the Proponent shall form a Community Liaison Committee (CLC) in consultation with NSEL and with municipal and community representatives. If a CLC is required, the Proponent must operate the CLC for the duration of the project, unless otherwise agreed to by NSEL. The NSEL Process for the Formation of a Community Liaison Committee shall be used for the guidance of the Proponent and community.

## 10.0 Archaeological Resources

10.1 The Proponent shall cease work and contact the Director, Heritage Division, Nova Scotia Department of Tourism and Culture, and the Executive Director, Union of Nova Scotia Indians, immediately upon discovery of an archaeological site or artifact unearthed during any phase of the proposed project.

#### 11.0 Transportation

- 11.1 The Proponent must ensure that trucking contracts stipulate adherence to speed limits, and site staff ensure that trucks are free of loose material before leaving the site.
- 11.2 The Propoent must acquire a "Special Moves" permit and subsequent approval from the TPW area manager.

#### 12.0 Wind Farm Development and Operation

- 12.1 The Proponent must prepare, within six months of approval, an Operator's Manual, for review by NSEL, including but not limited to:
  - system safe operating limits and descriptions
  - preventative maintenance and site upkeep
  - start-up and shut-down procedures
  - alarm response actions
  - emergency procedures plan
- 12.2 The Proponent must prepare, within six months of approval, a Health and Safety Policy and Procedures Manual, for review by NSEL.

12.3 The Proponent shall provide in a form acceptable to NSEL, proof of either ownership of the site or a lease or other written agreement or option with the landowner or occupier to enable the Proponent to conduct the activity on the site.

#### 13.0 Site Reclamation

13.1 The Proponent must submit a reclamation plan to NSEL for review and approval six months prior to initiating site reclamation and abandonment. The Proponent must reclaim the site to the satisfaction of NSEL.

#### 14.0 Contingency Plans

- 14.1 The Proponent shall provide for review and approval a contingency plan, as part of the Environmental Protection Plan, that includes but shall not be limited to:
  - a) accidental occurrences, including but not limited to contingencies for spills, including spill equipment kept on-site and location of emergency phone numbers
  - b) training to be delivered to staff
  - c) procedures for responding to incidents occurring during times when the facility is not staffed (e.g. evenings, weekends, holidays).

# Original Signed By

Carolyn Boliver-Getson Minister of Environment and Labour