Ministry of Natural Resources Peterborough District Office 300 Water Street 1st Floor, South Tower Peterborough, Ontario K9J 8M5

#### Ministère des Richesses naturelles

Ontario

Telephone: (705) 755-2001 Facsimile: (705) 755-3125

June 8, 2012

Christine Nicholls
Environmental Specialist
TransAlta
Box 1900 Station "M"
110-12 Avenue S.W.
Calgary Alberta
T2P 2M1

Dear Ms. Nicholls:

Subject: Ministry of Natural Resources (MNR) comments regarding Wolfe Island

**EcoPower Centre Post-Construction Follow-Up Plan Bird and Bat** 

Resources, Monitoring Report No.6

Thank you for the opportunity to review the fifth biannual monitoring report for the Wolfe Island EcoPower Centre. MNR has the following comments based on our review of the document:

### Direct Effects - Birds

Thirty seven carcasses of 20 bird species were collected during the reporting period. The estimated annual bird mortality rate was 1.69 birds/MW (3.90 birds/turbine). When combined with the results of the January to June 2011 report, the annual mortality rate can be calculated to 5.62 birds/turbine/year (2.43 birds/MW/year). This is below the annual threshold of 11.7 birds/MW as established in the monitoring plan.

As identified in our previous correspondences, MNR continues to have concerns with the on going mortality of Bobolink on site. MNR recommends that you review the "Endangered Species Act (ESA) Submission Standards for Activity Review and 17(2)(c) Overall Benefit Permits" and complete the associated and required form prior to the submission of any additional post construction monitoring reports. This guidance has been developed to provide policy, process and submission information for proponents seeking permits under clause 17(2)(c) of the ESA.

# <u>Direct Effects – Raptors</u>

Three Red-tailed Hawk fatalities were recorded over the course of this reporting period. When corrected for scavenger removal, this represents an approximate mortality rate of 0.09 raptors/turbine or 0.04 raptors/MW for the reporting period. When combined with results from the January to June 2011 reporting period, the annual mortality for raptors was calculated to be 0.28 raptors per turbine per year (0.12 raptors/MW/year). This is above the annual threshold of 0.09 Raptors/MR/Year as established in the monitoring plan.

In December of 2011, MNR finalized the 'Bird and Bird Habitat: Guidelines for Wind Power Projects' outlining a threshold based approach to identify and mitigate potential negative environmental effects resulting from the operation of wind turbines. The raptor mortality

threshold of 0.2 Raptors/turbine/year outlined in the guideline was established based on the range of bird mortality at wind power projects in Ontario and in comparison with jurisdictions across North America. As outlined in MNR Guidelines, we encourage you to investigate further mitigation measures which will reduce raptor mortalities as your facility, and to initiate discussions with our office in order to initiate those plans prior to the fall migration period.

### Disturbance Effects Monitoring - Raptors

As indicated in the report, and based on the seasonality of monitoring results, we look forward to a more fulsome discussion of ongoing raptor monitoring to be presented in report number 7.

## Direct Effects - Bats

Considering correction factors, the 52 bat carcasses, of four species recovered, represent approximately 6.03 bats/turbine or 2.62 bats/MW for the reporting period. When the annual estimated mortality is calculated, the resultant estimated annual mortality rate of 2.83 Bats/MW (6.51 Bats/Turbine). This is below the adaptive management thresholds of 12.5 bats/MW as identified in the Follow-up Plan.

MNR has finalized the 'Bat and Bat Habitats Guidelines for Wind Power Projects (July 2011)' which all new wind power projects subject to the MOE's Renewable Energy Approvals regulation will be required to follow. The Guidelines require operational mitigation when post-construction monitoring shows an estimated bat mortality rate for a facility to be more than 10 bats/turbine/year. The operational mitigation consists of changing the turbine cut-in speeds, or feathering of wind turbine blades from sunset to sunrise during the period of July 15 to September 30.

While MNR will continue to be supportive of the research that has been implemented to evaluate practical measures to reduce bat mortality at the Wolfe Island EcoPower Centre, we are generally concerned with the lack of third party review and involvement. At this time, we recommend that a further year of monitoring be implemented, and the study design be modified, to ensure adequate statistical power of comparison, and that a third party expert be engaged to review, and assist, in the reporting of research results.

Thank you for the opportunity to review and provide comments. Please feel free to contact me with any comments or questions.

Sincerely,

CC

Eric R. Prevost Renewable Energy Planning Ecologist Peterborough District

> Rob Read, Environment Canada Mathieu Leblanc, Natural Resources Canada Karen Bellamy, District Manager, Ministry of Natural Resources