Ministry of Natural Resources

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July 5, 2011

Garry Perfect Environmental Specialist TransAlta 34 Harvard Road, Guelph, ON N1G 4V8

Dear Mr. Perfect:

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

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

Resources, Monitoring Report No.4

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

Please note that all mortality results should be presented in terms of number per megawatt, as well as number per turbine, in order to maintain consistency throughout the report.

<u>Direct Effects – Birds</u>

Fifty two carcasses of 22 bird species were collected during the reporting period. The estimated annual bird mortality rate was 3.60 birds/MW (8.2 birds/turbine). This is below the annual threshold of 11.7 birds/MW as established in the monitoring plan.

As identified in our letter, dated January 26, 2011, MNR continues to have concerns with the on going mortality of Bobolink on site. MNR representatives will be continuing discussions with you regarding the implications of species at risk mortalities which have occurred and appropriate authorizations required under the Endangered Species Act. We further recommend that monitoring and notifications continue as per the plan. Additionally, we also recommend initiating discussions with appropriate agencies or species experts regarding species at risk on site, to avoid further impacts to those species.

<u>Direct Effects – Raptors</u>

Two raptor and vulture fatalities were recorded over the course of the reporting period; one redtailed hawk and one turkey vulture. 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. Raptors and vultures are listed on the same Schedule (7) of the Fish and Wildlife Conservation Act, so mortality data is combined for the two.

As per the options outlined in the Post-Construction Follow-Up Plan and outlined in Report #3, MNR and TransAlta have worked to develop a raptor behavioral monitoring study to assist in determining factors that may contribute to raptor mortality at the facility. We understand that this monitoring is ongoing and that details of the raptor monitoring study will be made available in the near future.

Disturbance Effects Monitoring – Raptors

Wolfe Island is known to support a number of raptors and owls during the winter months. Valid comparisons of densities and species presence/absence in relation to other observation points in Southern and Eastern Ontario are important to capture long-term trends and yearly fluctuations in species abundance and presence.

Within and among-year comparisons will be important in quantifying any disturbance effects. We ask that you continue to implement the plan and ensure that data is presented and compared for both within, and among-year variations. Multiple years of monitoring will provide a better indication of trends and potential disturbance effects.

Direct Effects - Bats

Considering correction factors, the 111 bat carcasses recovered represent approximately 21.84 bats/turbine or 9.50 bats/MW for the reporting period. Four species of bats were collected and 84.7% were long-distance, migratory tree bats; an expected trend.

MNR is currently developing the 'Bat and Bat Habitats Guidelines for Wind Power Projects (Draft March 2010)' 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.

MNR recognizes that the Wolfe Island EcoPower Centre has an approved monitoring plan in place and is not subject to the new Guidelines. MNR also recognizes that the reported estimated mortality for the reporting period at the Wolfe Island EcoPower Centre (9.50 bats/MW) is lower than the adaptive management threshold (12.5 bats/MW) identified in the approved plan. Although the bat mortality rate is below the threshold, TransAlta has proactively developed a research program that will take place between July 15 and September 30, 2011 during the fall bat migration period to evaluate practical measures to lessen the effects of operating wind turbines on bats at Wolfe Island. The bat mitigation research will involve operational control of selected turbines during night time hours and low wind conditions when bats are most active. TransAlta has engaged recognized bat experts at a Canadian university to participate in the research program.

As noted in our correspondence dated January 26, 2011, MNR is supportive of the proposed research to be conducted to evaluate practical measure to reduce bat mortality at the Wolfe Island EcoPower Centre.

MNR supports the recommendation to continue mortality and disturbance effects monitoring, as per the February 2010 Follow-Up Plan, with consideration of comments provided above.

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

Sincerely,

Originally Signed by

Eric R. Prevost Renewable Energy Planning Ecologist Peterborough District

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