

December 20, 2007

Mr. Robert Miller
Canadian Renewable Energy Corporation
c/o Stantec Consulting Limited
361 Southgate Drive
Guelph ON N1G 3M5

Re: Wolfe Island Wind Project

The Kingston Field Naturalists (KFN) welcome the opportunity to comment on the Canadian Renewable Energy Corporation (CREC) project of 86 wind turbines on Wolfe Island. The KFN understand the need to develop alternative sources of energy that do not release carbon dioxide in the atmosphere. We also know that all industrial activities have an impact on the environment and that even “green” energy production is not exempt from a potential negative effect on the flora or fauna.

The KFN have made recommendations about this project during other phases of the consultation process. They have focused on the construction phase, the location of the turbines and the operation of the turbines.

The Environmental Review Report (ERR) indicates that the construction materials will be transported to Wolfe Island on barges and unloaded at the winter ferry terminal and then transported to the sites by road. Some temporary roads will be built to facilitate this and permanent roads will lead to the sites. We have noted that in the case of several turbines, the access road leading to the sites traverses a rare species area: this is the case for the roads leading to turbines 29 and 30 and leading to turbine 86. While we understand that the exact location of the rare species observations is not available, extra precautions should be taken in the construction of these particular access roads.

The locations of the turbines’ masts are consistent with the setbacks agreed at the OMB hearing. However, the ERR notes that the tips of several turbines’ blades will be closer to the wetland and woodlot than the setback (table 7.3, p. 267). In the case of some of these turbines, this could be alleviated by moving the mast location thus avoiding violating the setbacks. Turbines 4 and 5 could be moved north by 50 meters to further minimize their impact on the adjacent wetland. Turbines 30 and 31 could similarly be moved 50 meters to the east. The maps provided do not allow us to make similar suggestions for turbines 29 and 61 but any adjustment of their position that would increase their distance from the Big Sandy Bay wetland and Bayfield Bay marsh would certainly reduce the impact on these wetlands.

During the operation of the turbines, the greatest concern is mortality of birds and bats. The KFN are pleased that the report proposes a three-year monitoring of bird mortality at representative turbines, of winter raptor use on Wolfe Island, of migrating waterfowl and of grassland and marsh birds. However, a specific protocol for the shut-down of a turbine that would be associated with bird or bat mortality is not mentioned. As noted in the

report, raptors have a low reproductive rate and any mortality would be a source of great concern. Also, certain species of migrating passerines (e.g. Cerulean Warbler) have their breeding range just north of the Kingston area. These species are declining and any mortality would be significant.

During the period from 1972 to 1982, the KFN identified birds killed at the chimneys of the Lennox Generating Station west of Bath. More than 22,000 birds were collected before the floodlights at the towers were replaced by strobe lights. Nine Least Bittern (threatened specie), 172 Nashville Warbler, 2485 Magnolia warbler, 1491 Blackburnian Warbler, 2408 Bay-breasted Warbler and 325 Canada Warbler were killed as well as numerous other species. This shows that bird mortality is a very real phenomenon at man-made structures.

There is no doubt that bird mortality will occur at the wind turbines. It is not enough to monitor this. The number of birds killed that would result in a shut-down period for each species group: waterfowls, raptors and passerines must be announced before the turbines begin operation. For endangered species, any mortality should result in a predetermined shut-down period.

The ERR also suggests that bat mortality will be minimal because no nesting habitat exists nearby. The KFN believe that night illumination of the turbines will attract insects and bats will in turn travel to these sites from their roost and will be at risk during feeding. In a post-construction study (fall migration only) of avian and bat collision fatalities at the 120 turbine Maple Ridge Wind Power Project in Lewis County, New York (released June 2007), the bat mortality was determined to be almost three times the bird mortality. It was estimated that almost 5000 bats would be killed during each fall migration when this project is expanded to 195 turbines. Therefore, we recommend that a three-year monitoring of bats be carried out.

In summary, the KFN request:

- a three-year post-production monitoring of bats
- a protocol for shut-down of individual turbines based on quantitative bird or bat mortality thresholds announced before construction
- moving of turbine masts 4, 5, 30 and 31 to satisfy setbacks for the turbines' blade tips

The Kingston Field Naturalists look forward to a prompt response to our comments.

Yours truly,

Hugh Evans
President