Rochester Birding Association, 55 Ontario St., Honeoye Falls NY 14472

October 29, 2015

Honorable Kathleen H. Burgess
Secretary of the Commission
New York State Public Service Commission
Empire State Plaza
Agency Building 3
Albany, NY 12223 – 1350

Dear Ms. Burgess,

Thank you for the opportunity to comment on the Apex Lighthouse Wind located in the Towns of Somerset, Niagara County and Town of Yates, Orleans County, New York. The Rochester Birding Association (RBA) supports wind energy as an alternative to fossil fuel power generation, provided that the facilities do not cause undue harm to nesting and migrating birds. The Lighthouse Wind project, however, is in a critical migratory corridor for raptors, migratory songbirds and shorebirds. The western NY southern shore of Lake Ontario is also important migratory, breeding and wintering habitat for grassland birds. Placing wind turbines in the proposed location will put millions of birds in danger of collision with the turbines. We need green energy but not at this cost.

Site Evaluations Are Necessary Prior to Project Approval

When wind farms are located in areas heavily frequented by migratory and nesting birds, many deaths have occurred. Bat mortality has also been high and, in some cases, exceeded bird deaths. To ensure that wind farms are located where bird and bat deaths will not jeopardize the population of any species, RBA believes that scientific site evaluations must be conducted before wind turbines are approved by the responsible governmental authorities. These studies must be conducted by qualified researchers using accepted scientific methodology and include technologies such as remote sensing and radar imaging to establish the patterns of bird migration and nesting in the vicinity of the proposed wind farm. Multi-year evaluations must be conducted if a proposed location is found to have particular sensitivity to bird and bat activity as is the area of the proposed Lighthouse Wind project. Again, site evaluation must take place before the wind farm location receives governmental approval.

The Southern Shore of Lake Ontario is an internationally recognized major migratory route for birds

The south shore of Lake Ontario is an internationally recognized major migratory route for birds. Observational data is regularly monitored and maintained by the Rochester Birding Association and others, such as Braddock Bay Raptor Research, Braddock Bay Bird Observatory, Hawk Migration Associations of North America, (HMANA) and Buffalo Ornithological Society on local listserves, the eBird database, Christmas Bird Counts, and the New York State Ornithological record. This data shows that the region within one to six miles of the shoreline is a major migratory pathway for migratory song birds and raptors. The western NY southern shore of Lake Ontario is also important migratory, breeding and wintering habitat for grassland birds. Birds rest and refuel in the lakeshore region during their biannual migrations. Significant scientific studies by Audubon NY and The Nature Conservancy in the last ten years have also documented the significance of this corridor.

Project Area Overlaps with Established Audubon NY Grassland Bird Breeding Focus Area

Audubon New York, with support from the New York State Department of Environmental Conservation (NYSDEC), is coordinating a comprehensive grassland bird conservation effort in New York State—a conservation priority highlighted in New York's Comprehensive Wildlife Conservation Strategy. A significant portion of this initial effort culminated with the drafting and implementation of a grassland bird conservation plan (Morgan and Burger 2008). The focus of this conservation effort is on regions of the state that have the highest likelihood for sustaining grassland bird populations on a long-term basis, they identified regions where conservation efforts would be effective and would help identify priorities for the comprehensive statewide conservation plan. The Lighthouse Wind project in the Towns of Somerset and Yates proposed by Apex is in the area designated by this study as Focus Area 1, chosen because the breeding bird atlas surveys have shown the majority of target species to breed in the area, see Table 1 and Figure 3.

In New York, grassland bird population declines are linked strongly to the loss of agricultural grasslands, primarily hayfields and pastures. Because the vast majority of grasslands in New York are privately owned hayfields and pastures, it would be impossibly expensive to protect all of them through conservation programs that focus on acquisition and management of public lands. Therefore, regions of the state where grassland birds are most likely to persist, i.e. focus areas, have been identified and will be targeted for surveys and monitoring and serve to focus conservation resources—particularly incentive programs that encourage proper management of private lands, although proper management of publicly-owned lands in these areas is also important to this effort.

Table 1

Species	PIF[1]	NE Concern[2]	NY SWG[3]	NY E,T,SC[4]	Tier
Northern Harrier *Circus cyaneus*	High Regional Priority/High Regional Threats	Yes	SWG	T	**1**
Upland Sandpiper *Bartramia longicauda*	High Continental Concern/High Regional Responsibility, High Regional Threats	Yes	SWG	T	**1**
Short-eared Owl *Asio flammeus*	High Continental Concern/Low Regional Responsibility, High Regional Threats	Yes	SWG	E	**1**
Sedge Wren *Cistothorus platensis*	High Regional Priority/High Regional Threats	Yes	SWG	T	**1**
Henslow's Sparrow *Ammodramus henslowii*	High Continental Concern/High Regional Priority; High Regional Priority/High Regional Concern, High Regional Threats	Yes	SWG	T	**1**
Grasshopper Sparrow *Ammodramus savannarum*	High Regional Priority/High Regional Threats	-	SWG	SC	**1**
Bobolink *Dolichonyx oryzivorus*	High Regional Priority/High Regional Concern, High Regional Responsibility	-	SWG	-	**1**
Loggerhead Shrike *Lanius ludovicianus*	High Regional Priority/High Regional Threats	Yes	SWG	E	**1**
Horned Lark *Eremophila alpestris*	-	-	SWG	SC	**2**
Vesper Sparrow *Pooecetes gramineus*	-	-	SWG	SC	**2**
Eastern Meadowlark *Sturnella magna*	High Regional Priority/High Regional Concern	-	-	-	**2**
Savannah Sparrow *Passerculus sandwichensis*	-	-	-	-	**2**
Wintering Raptors*					**2**

* Including Northern Harrier, Short-eared Owl, Snowy Owl (*Bubo scandiacus*), Rough-legged Hawk (*Buteo lagopus*), Red-tailed Hawk (*Buteo jamaicensis*), American Kestrel (*Falco sparverius*), and Northern Shrike (*Lanius excubitor*).

[1]From Partners In Flight's species assessment for New York's Bird Conservation Regions (BCRs 13, 14, 28, 30).

[2]Species of Regional Conservation Concern by Northeast Endangered Species and Wildlife Diversity Technical Committee.

[3]State Wildlife Grants "Species of Greatest Conservation Need" in NY, March 2003.

[4]Species listed as Endangered, Threatened, or Special Concern in NY.

Project Area Overlaps with Known and Important Migratory Stopover Areas Along The Lakeshore

From 2009- 2011 The Nature Conservancy, Audubon New York and the New York Natural Heritage Program conducted a field study to test some key hypotheses on migratory stopover habitat for small neotropical migratory birds along the south shore of Lake Ontario. The purpose in doing so was to learn more about characteristics of these habitats that are difficult to distinguish in remote images. The results were used to create maps predicting where important stopover habitat is and to hone management recommendations. As you can see on the resulting Migratory Bird Stopover Habitat map, Figure 1, the area proposed for Lighthouse Wind project (outlined in black) overlaps with areas predicted to have high to very high abundance and richness of migratory birds during spring and fall migration. Figure 2 shows the expanded use of agricultural areas in fall. Rusty Blackbird, for example, is one example of a "Vulnerable" species (IUCN Redlist) that is dependent on the lakeshore area during migration.

This probability of richness during spring and fall migratory season indicates an increased risk of impact to birds by wind turbines placed in this region. Also on this map, directly south of the proposed Lighthouse Wind project, lies the Iroquois National Wildlife Refuge, and Tonawanda and Oak Orchard Wildlife Management Areas (this L-shaped complex is marked with cross hatches). This wildlife complex provides waterfowl and other birds an important migratory pathway and it is to be expected that when these resting waterfowl resume their migration they will head directly north into the Lighthouse Wind project. The same is true heading south in the fall. On hazy, foggy days these waterfowl are likely to collide with wind turbines.

The Lake Ontario Migratory Bird Stopover Project found, as Bonter et al. (2009) did, that spring migrants were generally strongly correlated with developed cover, particularly when considering a large landscape context (3-6 miles). However, in the fall, migrants were actually positively correlated with agricultural cover with in six miles of Lake Ontario (Figure 2). This interaction between landscape cover and distance from the Lake demonstrates that after crossing Lake Ontario migrants rest and refuel along the lakeshore in isolated wooded patches in the agricultural expanse between Buffalo and Rochester.

World Class Raptor Migration Occurs on the Southern Lake Ontario Shoreline

The southern Ontario Lakeshore concentrates raptors (hawks, owls, eagles) in high numbers during their biannual passage. Indeed, raptors numbers have been counted at the Braddock Bay Hawkwatch since 1949. This hawkwatch, administered by Braddock Bay Raptor Research, is a member hawkwatch of the Hawk Mountain Migration Association (HMANA). On a single day in April of 2011, more than 42,000 raptors were counted by professional hawkwatchers. The next year, on April 27th, another 37,000 hawks were counted in a single day (see Braddock Bay Hawkwatch summaries, below). This demonstrates the potential for mass avian mortality should a day's favorable winds direct birds toward the Lighthouse Wind Project.

HMANA's wind power policy calls for no wind power development in areas with landscape features known to attract raptors (such as interior ridges and the coastlines of the Great Lakes, Gulf of Mexico and the Atlantic and Pacific Oceans), in areas formally designated as Important Bird Areas, and in areas that experience concentrations of wintering, nesting and migrating raptors.

Apex's plan to site industrial wind turbines along the south shore of Lake Ontario has potential for disastrous—and irreversible—long-term effects as the south shore of Lake Ontario concentrates

migrating raptors (including significant numbers of the very fragile population of northeastern Golden Eagles), hosts many nesting Bald Eagles, provides important staging areas for migrating waterfowl and passerines, and includes areas officially designated as Important Bird Areas. Arguably the whole south shore of Lake Ontario could qualify as an IBA.

Because of the concentration on Lake Ontario of migrating raptors and other birds, as well as nesting eagles and other birds of conservation concern, it is not an appropriate location for industrial wind turbine projects, It is imperative that local municipalities and state and federal agencies establish setbacks from the south shore of Lake Ontario of at least six miles, under which industrial wind turbine projects are prohibited. Appropriate setbacks from active Bald Eagle nests also must be implemented.

When multi-year pre-construction studies confirm migration, wintering or breeding season concentrations of raptors in a particular area, then plans for development in that area must be abandoned. If such a study shows minimal concentration of raptors, or if specific designs can be demonstrated to pose minimal danger to wildlife present in the area, then projects can be considered. In cases when developers have invested in diligent efforts to locate wind power development appropriately, post-construction monitoring might still show an entire project or individual turbines to be particularly fatal to raptors: when this happens, turbines must be decommissioned or their operation suspended during the periods when the problematic turbines are found to be most destructive. Developers must agree to such remedial action as a precondition of project approval by federal, state and local permitting agencies. RBA feels these pre and post construction study recommendations for raptors should be required for songbirds, grassland birds and shorebirds as well.

RBA Cannot Support the Siting of the Lighthouse Wind Energy Project

In conclusion, the southern shore of Lake Ontario is a critical migratory corridor for both raptors and other neotropical migratory birds. Based on an abundance of biological data obtained from monitoring and other studies, the proposed project area is likely to have unacceptable levels of avian mortality. Therefore, it is not a suitable region for large industrial wind turbine facilities. The Lighthouse Wind or any other large scale wind turbine facility along the lake shore will put millions birds in danger of collision and death.

The Rochester Birding Association concludes that development of wind turbines along the south shore of Lake Ontario is ill-advised, the cost in birds and wildlife will be too high for the people and the ecological balance of New York State. We respectfully advise that the Lighthouse Wind project be relocated to an area that will result in fewer avian casualties.

RBA looks forward to working with government, industry and citizens to ensure that wind energy comes to our region in a way that does not cause significant harm to birds, bats and the ecosystems they inhabit.

Sincerely,

Laura Kammermeier
President, Rochester Birding Association

Works Cited

Morgan, M. R. and M. F. Burger. 2008. A plan for conserving grassland birds in New York: Final report to the New York State Department of Environmental Conservation under contract #C005137. Audubon New York, Ithaca, NY (available for download at http://ny.audubon.org/PDFs/ConservationPlan-GrasslandBirds-NY.pdf).

France, K.E., M. Burger, M.D. Schlesinger, K.A. Perkins, M. MacNeil, D. Klein and D.N. Ewert. 2012. Final report for Lake Ontario Migratory Bird Stopover Project. Prepared by The Nature Conservancy for the New York State Department of Environmental Conservation (Grant C303907 from the New York Great Lakes Protection Fund). Available from www.nature.org/nybirds.

Bonter, D.N., S.A. Gauthreaux, Jr., and T.M. Donovan. 2009. Characteristics of important stopover locations for migrating birds: Remote sensing with radar in the Great Lakes basin. Conservation Biology 23:440-448.

Braddock Bay Hawkwatch counts (Hilton, NY)

April 27, 2011 http://hawkcount.org/day_summary.php?rsite=353&ryear=2011&rmonth=04&rday=27

April 16, 2012 http://hawkcount.org/day_summary.php?rsite=353&ryear=2012&rmonth=04&rday=16