



Central & Western New York Chapter
1048 University Avenue
Rochester, NY 14607

January 11, 2016

Hon. Kathleen H. Burgess,
Secretary,
Public Service Commission
Three Empire State Plaza
Albany, NY 12223-1350

Dear Ms. Burgess:

This letter will provide comments by The Nature Conservancy on the Preliminary Scoping Statement submitted by Apex Clean Energy in relation to the proposed Lighthouse Wind Energy Project (LWP) between the Towns of Somerset, Niagara County, and Yates, Orleans County, New York.

The Nature Conservancy is a 501(c)(3) not-for-profit membership organization with the mission to conserve the lands and waters on which all life depends. Our vision is for a world where the diversity of life thrives – a world in which people act to conserve nature for its own sake, and for its ability to fulfill our needs and enrich our lives. In pursuit of this vision, we support New York’s ambitious energy goals to generate 50 per cent of the State’s electricity from renewable sources by 2030. Significant development of renewable energy generation will be necessary to achieve this important goal.

While our state moves toward a new energy future less dependent on fossil fuels, it is vitally important to proceed in a way that does not endanger the unique and valuable natural resources that could be impacted by energy infrastructure. Effective planning for a new energy future will require “Smart from the Start” practices to guide energy development that avoids or minimizes adverse impacts on wildlife and high-value natural resources. The New York State Energy Research Development Authority (NYSERDA) has funded tools that will enable New York to take this approach. For instance, a wind energy siting tool recently developed by The Nature Conservancy and NYSERDA provides the first comprehensive assessment of New York’s natural resources in the context of wind turbine suitability and provides a method for balancing renewable wind development and natural resource protection at a landscape scale.

The proposed site for the Lighthouse Wind Energy Project spans a substantial segment of the Lake Ontario shoreline, in an area identified by previous research as heavily used by migratory raptors and land-birds. With the aid of expert volunteer birders, The Nature Conservancy conducted a three-year

study (France, et al 2012)¹ to quantify the use of the southern Lake Ontario shoreline by migrating passerine land-birds. This study demonstrated the importance of shoreline stopover sites to these birds, which fly at night (to minimize predation) and descend as dawn approaches to rest and feed in wooded areas along the shore. The Lake Ontario shoreline is an important concentration area for migratory birds that spend portions of their life cycles throughout the Western Hemisphere. As a result, construction of infrastructure along this shoreline could have consequences far beyond Western New York.

Recent research (Bowlin, et al 2015)² has demonstrated that thrushes fitted with altimeters change altitude frequently during night flight, and descend at a gradual rate at dawn to rest, feed, and avoid predators. Very little other information is available on the altitude of night-migrating songbirds, or on their rate of dawn descent. It is highly likely that the thrushes studied by Bowlin would descend at dawn directly through the air space occupied by the turbines proposed for the Apex Lighthouse development, and thus would be endangered by the sweeping blades. The US Fish and Wildlife Service, in a letter (May 6, 2015) to Apex, referenced radar data that demonstrates the heavy use of wooded areas near this shoreline by migrating songbirds, and the danger to descending birds of the rotating turbines so close to the shoreline.

A recent synthesis of scientific information on the interactions of migrating birds and bats with Great Lakes shorelines (Ewert, et al 2011)³ provided a number of guidelines for placement and operation of wind energy developments in proximity to a coast. These guidelines recommend that wind towers be constructed no closer than 5 miles from a Great Lakes shore and turbines be feathered during peak migration periods and under certain weather conditions.

Because of the concerns stated above, it is vitally important that evaluation of the LWP proposal include thorough, site-specific consideration of the potential impacts to migratory birds, and the steps necessary to minimize such impacts. This evaluation will be inadequate without continuous tracking, through at least one spring and one fall migration season, of nocturnal movements of birds, including the altitudes of birds as they descend at dawn and ascend at dusk to continue migration.

Ideally, monitoring of nocturnal movements during two spring and two fall migration seasons would account for inter-annual variations in weather that affect the distribution of migrants. The Avian and Bat Study Plan submitted by Ecology and Environment on behalf of the proposed LWP does not include any examination of nocturnal movements by migrating songbirds and other land-birds, and thus will not provide an adequate analysis of the impacts of the proposed project.

In closing, we call your attention to the earlier comments on the Preliminary Scoping Document submitted by William R. Evans, and the comments submitted directly to Apex by David Stilwell of the US Fish and Wildlife Service. Thank you for the opportunity to comment on this proposal. We will be glad

¹ France, K.E., Burger, M., Schlesinger, M., Perkins, K.A., MacNeil, M., Klein, D., and Ewert, D.N., 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, New York Great Lakes Protection Fund), www.nature.org/nybirds.

² Bowlin, Melissa S., D. Benton, B. Murphy, E. Plaza, P. Jurich, J. Cochran, 2015. *Unexplained altitude changes in a migrating thrush: Long-range altitude data from radio-telemetry*. *The Auk: Ornithological Advances* 132: 808-816.

³ Ewert, D.N., J.B. Cole, E. Grman, 2011. *Wind Energy: Great Lakes Regional Guidelines*, The Nature Conservancy, Lansing, Michigan. <http://glmigratorybirds.org>

to answer questions or provide more information. Please contact David Klein at 585-546-8030, extension 7924.

Sincerely,

A handwritten signature in cursive script that reads "Jim Howe".

Jim Howe
Executive Director
Central and Western New York Chapter