**DELAWARE-OTSEGO AUDUBON SOCIETY, INC.** 

PO Box 544 Oneonta, NY 13820

November 16, 2007

David Groberg Director of Development Moresville Energy LLC 7564 Standish Place, Suite 123 Rockville, Maryland 20855

Dear Mr. Groberg:

I am writing on behalf of our organization regarding the bird survey reports for the proposed Moresville Energy Center provided to us.

The Delaware-Otsego Audubon Soc. is the local chapter of the National Audubon Society, and we are concerned with the well-being of the natural world in our area and beyond, with a particular emphasis on birds. We have 400 members in Delaware, Otsego, Schoharie and Chenango Counties, including a number in the Towns of Stamford and Roxbury.

Our organization has been involved in review of several wind projects in New York State, and has surveyed two proposed project areas for birds that may be impacted by these proposals. In addition, our members are familiar with the area proposed for the Moresville Energy Center, having gathered data for the 1980 and 2000 NY Breeding Bird Atlases, and having surveyed migrating raptors from Mt. Utsayantha, as well as other informal observations.

We support wind power as an environmentally preferable alternative to fossil fuel and nuclear power, and have adopted a formal position to that end (attached). In addition, we have demonstrated our support for wind power by purchasing wind certificates from the Madison project in NY. However, as our position notes, it is essential that wind projects be properly sited to minimize impacts to birds. To ensure this, thorough pre-construction surveys of resident and migrant birds must be carried out prior to approval and construction of these facilities.

As you are aware, it is now standard practice to review potential impacts to birds and other wildlife prior to construction of wind projects. In addition, both the Town of Stamford and Town of Roxbury local laws governing wind projects call for such review.

The avian studies prepared for the Moresville project indicate a potentially significant movement of birds in the vicinity of the proposed 33 ridgetop turbines. Radar monitoring during spring and fall migration indicate passage of as many as 800 birds per kilometer per hour on peak migration nights. Overall passage rates of 200 to 300 birds per kilometer per hour were recorded during these same periods. In addition, many of these birds were determined to pass at an elevation within or near the swept area of the turbine blades.

## Moresville Radar Studies Inadequate

Unfortunately, the radar equipment used to determine bird movement was located some 2 ½ miles from the ridgetop location of the turbines, and 1000 feet below the turbine blades. As a result, it is impossible to determine if birds did actually move through the turbine area. The study attempts to correct for this poor location by arguing that birds will follow the contours of the landscape and thus climb above the turbines when they reach the ridge. However, this assumption is based on extrapolation from studies at other ridgetop wind project sites, and is not supported by any on site observations or measurement.

Using data from other projects to predict potential threats to birds at Moresville is not scientifically valid. This practice is discouraged in wind project guidelines from the US Fish and Wildlife Service:

"Data on wildlife use and mortality collected at one wind energy facility are not necessarily applicable to others; each site poses its own set of possibilities for negative effects on wildlife."

Even if the assumption of similar flight patterns at Moresville and the other sites were to be accepted, a significant threat to birds from the turbines still remains. The other wind project studies cited indicate as many as 25% of nocturnal migrants flying below turbine height (heights which are *lower* than the Moresville turbines). This represents hundreds to thousands of birds per night passing through the project area at the elevation of the swept areas of the turbine blades.

With data showing large numbers of birds in the vicinity during migration, it is critical that monitoring be carried out <u>at the site</u> of the turbines in order to survey the birds actually present and their elevation.

# Survey Period Insufficient to Accurately Assess Bird Migration

The diurnal migrating bird survey report, the breeding season bird survey report, and the radar and acoustic survey of bird migration each cover one year of surveying the respective aspect of bird activity. However, there is significant variation from year to year in each of these areas of bird behavior and movement. One year of study does not provide sufficient data to draw conclusions as to the potential threats to birds from the wind project.

Recommendations and guidelines from ornithological organizations and governmental entities involved with bird conservation, including our own, increasingly call for multi-year studies to accurately document bird populations and migration in areas proposed for wind projects. The need for more in-depth studies is particularly noted as being necessary for ridgetop projects such as Moresville.

For example, the wind energy policy of the American Bird Conservancy, one of the world's most respected ornithological organizations, states:

"The construction and planning of wind turbines on ridges, such as in the Appalachians, where birds migrate has raised concerns from ornithologists and birders. A thorough review for potential avian mortality and disturbance of critical habitat should be conducted for each new wind turbine farm."

and

"Surveys for nocturnal migrants where migratory corridors exist, especially for wind projects along mountain ridgelines, should be conducted. If there are science-based concerns over avian mortality requiring more detailed surveys, two years of pre-construction surveys of migratory birds should be considered. As migration is highly variable in magnitude and temporal and spatial distribution, one year is considered a minimum for identifying potential problems, unless projects are very small or located in areas that have a very low risk to birds."

In order to adequately assess the magnitude of bird migration in the project area, at least one additional spring and one additional fall migration period should be surveyed, using properly located radar equipment.

## Independent Review of Moresville Studies Needed

The American Bird Conservancy, along with the US Fish and Wildlife Service, call for independent analysis of avian studies carried out by wind power developers. They state that these analyses:

"should be conducted by a team that includes federal and/or state agency wildlife professionals with no vested interests (such as monetary or personal) in the sites selected."

No such independent analysis of the avian studies at the Moresville site has been performed. Considering the questionable radar studies detailed above, it is even more important that an independent review be carried out. Such review should be arranged by the Towns of Roxbury and Stamford through their environmental consultants, rather than Moresville Energy, to ensure objectivity.

## Post-construction Studies

The avian studies reports do not include any mention of post-construction studies for bird mortality at the turbine sites. Again, nearly all environmental, ornithological and governmental groups involved with wind project siting and review stress the importance of post-construction studies, in order to assess the accuracy of the pre-construction studies, and to provide mortality data that can used in evaluating future projects.

As stated by the American Bird Conservancy:

"Statistically robust post-development mortality studies of avian and bat mortality should be required for at least two years after operation of the turbines begins. If there are legitimate mortality concerns raised by the monitoring, the studies should continue until monitoring demonstrates that the mortality concerns are resolved."

#### Audubon Position on Moresville Project

As stated earlier, we support wind power, as detailed in our formal position, and we hope to support the Moresville Project as a beneficial energy source within our chapter area. However, it is critical that a full and thorough assessment of avian impacts be carried out by the project developer. This important information is needed by the public, by reviewing agencies, by the municipalities that will pass judgment on the project, and by organizations such as ours.

The avian studies and surveys of the Moresville Project to date do not constitute a full and thorough assessment, for the reasons detailed above, and as a result, we cannot support the project at this time. We urge Moresville Energy and the responsible agencies and municipalities to ensure that adequate studies are performed before this project is approved and constructed.

Sincerely,

Andrew Mason, Conservation Chair

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cc: Town of Roxbury Planning Board Town of Stamford Planning Board NY State Department of Environmental Conservation NY State Energy Research and Development Authority