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January 22, 2014

Erle Townsend
Project Manager - Division of Land Resource Regulation
Maine Department of Environmental Protection
17 State House Station
28 Tyson Drive
Augusta, Maine 04333-0017

RE: Canton Mountain Wind, LLC, MDEP Project Number L-25557-24-A-N & L-25558-TB-B-N

MDIFW revised comments

Dear Erle:

As you well know, the advent of wind power in Maine is creating new challenges for both the Maine Department of Environmental Protection and the Department of Inland Fisheries and Wildlife. Regarding the challenges facing our Agency, wind power development has been steadily increasing across our landscape and MDIFW staff have been involved with assessing impacts not only through numerous, large-scale field survey efforts to determine site-specific concerns for a wide variety of species and habitats, but also through consulting with our peers across the region, as well as the nation, and by reviewing the existing research on the subject.

In the case of bats, this research is still in its infancy but is growing as well as evolving. Consensus among our peers with other state wildlife agencies, as it pertains to wind curtailment and protection of bats, has been toward increasing minimum wind speeds at which turbines are allowed to turn freely. Unfortunately, determination of the threshold needed to provide the greatest protection possible to this animal while still allowing the wind industry to maximize its generating capacity is also evolving. Understandably, higher curtailment is a major concern to the wind industry, as generating opportunities are lost.

As it pertains to the Canton Wind Project, while we recognize that our revised curtailment recommendations, as detailed in our letter dated November 1, 2013, was a change from earlier discussions the timing of the recommendation had everything to do with the timing of the U.S. Fish and Wildlife Service October 2, 2013 announcement that Federal Endangered Species status was warranted for northern long-eared bats. This necessitated that we reexamine the most recent research and modify our curtailment policy to provide further protection to all of our species that are in jeopardy including reviewing Maine Endangered Species Act listing for two bats currently listed as Special Concern--the little brown bat (*Myotis lucifugus*) and northern long-eared bats (*Myotis septentrionalis*).

While MDIFW still has concerns as to what the curtailment threshold needs to be to protect bats, we are revising our recommendations from November 1 to make them consistent with our most recent curtailment recommendations for another wind power project in Maine that is also in the final stages of permitting with MDEP. This revised curtailment is more protective than previously permitted wind projects in Maine:

Wind turbines will operate only at cut-in wind speeds exceeding 5.0 meters per second each night (from at least ½ hour before sunset to at least ½ hour after sunrise) during the period April 20 – June 30; 6.0 meters per second each night (from at least ½ hour before sunset to at least ½ hour after sunrise) during the period July 1 – September 30; 5.0 meters per second each night (from at least ½ hour before sunset to at least ½ hour after sunrise) during the period October 1 – October 15. Cut-in speeds are determined based on mean wind speeds measured at hub heights of a turbine over a 10-minute interval. Turbines will be feathered during these low wind periods to minimize risks of bat mortality. These cut-in speeds are independent of ambient air temperature.

Please note that MDIFW will be recommending a minimum cut-in speed of at least 6 meters per second for all future wind power projects, consistent with its “Maine Turbine Curtailment Requirements to Decrease Bat Mortality” policy:

Wind turbines will operate only at cut-in wind speeds exceeding 6.0 meters per second each night (from at least ½ hour before sunset to at least ½ hour after sunrise) during the period April 20 – October 15. Cut-in speeds are determined based on mean wind speeds measured at hub heights of a turbine over a 10-minute interval. Turbines will be feathered during these low wind periods to minimize risks of bat mortality. These cut-in speeds are independent of ambient air temperature.

Post-project mortality studies for birds and bats

MDIFW offers the following recommendations as they pertain to post-construction monitoring for birds, as discussed during a meeting between MDIFW, MDEP, and the Applicant and their consultants on December 10, 2013. Note that while we are not requiring direct post-construction monitoring for bats, all observed bat carcasses should be documented and reported to MDIFW during the course of the bird carcass monitoring. All post-construction monitoring plans should be submitted to MDIFW for review and approval prior to implementation:

1. Daily searches will occur during peak migration periods (tentatively April 15 - June 1 and August 1 – October 15, subject to slight adjustment via new data) during years 1, 2, and 3 of project operation.
2. Radar will be used concurrently in years 1, 2, and 3 of project operations to attempt correlating observed mortality with nightly passage rates. Radar must be conducted at a time that maximizes nightly data collection.
3. Analyses will include weather and turbine operation variables.
4. Carcass persistence trials will provide corrections for searcher efficiency and scavenger rates.
5. All turbines will be searched at the project.

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6. A fourth year of mortality monitoring during years 4 - 6 of operations may be required based upon initial findings and developed with MDIFW review and approval

The Department requests that the recommendations made within this letter be made conditions of the MDEP permit. Please feel free to contact my office if you have any questions regarding this information, or if I can be of any further assistance.

Best regards,

A handwritten signature in blue ink, appearing to read "John Perry". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

John Perry
Environmental Review Coordinator