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December 9, 2013

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

**RE: Bat Curtailment at the Bingham Wind Power Project**  
**Project #: L-25973-24-A-N / L-25973-TG-B-N**

Dear Dan:

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 Bingham Wind Project, MDIFW called both First Wind and MDEP prior to the formal submittal of the recommendation to increase the minimum curtailment wind speed. While we recognize that this was a change from earlier discussions it must be re-emphasized that the timing of the recommendation had everything to do with the timing of the U.S. Fish and Wildlife Service October 2 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*).

MDIFW continues to appreciate the open communication and exchange of information on the Bingham Wind Project between MDEP, First Wind, and our Agency. While concessions had to be made by all parties involved, and MDIFW still has concerns as to what the curtailment threshold needs to be to protect bats, we accept the mutually-agreed upon curtailment for the Bingham Wind Project, as stated below, as it 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.**

Additionally, all other points emphasized in MDIFW’s October 9, 2013, formal review recommendations and comments remain. Specific to aquatic resources, recent conversations between MDIFW’s Deputy Commissioner and First Wind have resulted in acceptance of MDIFW’s recommended scope changes over earlier designs at several wetland drainages that will facilitate habitat connectivity for smaller organisms, as identified during site visits and through subsequent discussions. MDIFW also appreciates First Wind’s willingness to improve riparian buffers and to correct barriers at stream crossings that were identified by MDIFW. Of particular note, recommendations #4, #10, #12 (Stream S027), and #13 are important enhancements that will protect water quality and benefit aquatic resources within the Project area.

Finally, note that final comments on Deer Wintering Areas will be addressed shortly in a separate letter.

That MDEP, MDIFW, and First Wind have worked so long and so collaboratively on this project, with each entity addressing the concerns of the others while still maintaining their respective professionalism and integrity, is a testament to all those involved. We look forward to working with MDEP and First

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Wind to resolve outstanding issues. 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 black ink that reads "Charles S. Judd". The signature is written in a cursive style with a large initial 'C'.

MDIFW Endangered & Threatened Species Coordinator