

E-mail From: Richard Bard
Mon 5/9/2011 10:08 AM
To: Don Murphy, LURC Project Planner
CC: Steve Timpano, IF&W

RE: Applicant Response to IF&W Review Comments - T16MD Bull Hill Wind Project DP#4886

Don,

MDIFW offers the following comments on First Wind's response to our earlier comments about the Blue Sky East Wind Project. We are still working on some vernal pool issues, but I believe this completes our comments on all other issues at this time.

Draft Post-Construction Monitoring Plan

First Wind challenged the recommended mortality search schedule proposed by Tom Hodgman, primarily on the grounds that they prefer to finalize the plan after permits are issued and before construction begins. While we agree with the concepts of adaptive management, MDIFW would prefer to have an acceptable plan in place before any permits are issued, with the understanding that modifications can be made as new information becomes available.

Exhibit G of the response states that "First Wind intends to conduct continuous monitoring from April 15 to October 30," but the table that follows leaves gaps in May and September, two time periods that MDIFW considers critical to understanding the impacts on birds and bats. MDIFW stands by our recommendation for weekly mortality searches at all turbines on the following schedule: April 15 – June 7 and July 7 to October 15. This schedule provides the same number of weeks of coverage as First Wind's proposed schedule, but makes more biological sense by covering all of the periods of likely high bird and bat activity.

Operation Control Measures (Curtailment)

First Wind proposes to monitor bat mortality for one to two years before deciding whether curtailment (i.e. increased cut-in speed) is warranted for Blue Sky East. In Exhibit G the developer cited the low numbers of bats detected in pre-construction radar studies compared with similar projects in Maine, and concludes that there is not adequate cause to take pro-active measures to prevent bat mortality.

Stantec acknowledges that bat acoustic studies provide overall bat species composition and bat activity data, but to date, a statistical relationship between pre-construction acoustic bat activity data and post-construction mortality has not been quantified.

Estimates of post-construction mortality for bats provide estimates of mortality that are likely lower than actual mortality. Because of the uncertainty in detection rates due to inherent problems with searcher efficiency and carcass persistence, bat mortality estimates have potentially significant error. Therefore drawing conclusions regarding impact of mortality is difficult, if not inappropriate. Given these uncertainties as well as our concern for declining populations of *Myotis* species, MDIFW prefers to apply the

best available methods accepted by the scientific community. Arnett et al. (2010) showed that a turbine cut-in speed of 5 meters per second significantly reduced bat mortality. Studies cited in MDIFW's comments dated March 10, 2011 show that increased cut-in speed reduces bat mortality on nights with low wind velocity.

Additionally, White-nose Syndrome (WNS) has caused precipitous declines in bat populations in the Northeast over the past several years. Bats in the genus *Myotis* have been particularly hard hit, prompting the US Fish and Wildlife Service (USFWS) to determine that listing northern long-eared bats (*Myotis septentrionalis*) and eastern small-footed bats (*Myotis leibii*) under the Endangered Species Act is warranted. The USFWS is also considering an emergency listing of little brown bats (*Myotis lucifugus*) to the Endangered Species list. Models predict that the little brown bat may face extinction by 2026 if current trends continue (Frisk et al. 2010). *Myotis* calls represent up to 50% of the calls identified in First Wind's 2009 Acoustic Bat Survey. Wind power projects throughout Maine have recorded bat sequences at acoustic detectors from April 20th through October 15th. The curtailment measures MDIFW are recommending will help minimize impact of the project to bat species.

Based on peer-reviewed analyses of the efficacy of operational curtailment and the imminent threat of WNS, MDIFW believes that pro-active avoidance of preventable bat mortality is warranted immediately, rather than one to two years of mortality study

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