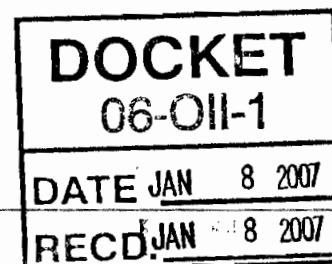


John Mathias - Fwd: Draft guidelines on reducing bat/bird impacts at turbines

From: Linda Spiegel
To: John Mathias
Date: 1/8/2007 9:40 AM
Subject: Fwd: Draft guidelines on reducing bat/bird impacts at turbines



>>> "Larry Rabin" <larabin@alum.berkeley.edu> 1/7/2007 7:16:30 AM >>>

Dear Linda,

I just downloaded an electronic copy of the CEC draft staff report entitled, "Statewide Guidelines for Reducing Impacts to Bats and Birds from Wind Energy Development" (CEC-700-2006-013-SD). I must say that I am pleased that the CEC is in the process of developing these guidelines.

Though I have not had time yet to read through the entire document, I did have a chance to read through the pre-permitting and operations monitoring sections. I was glad to see that guidelines along these lines are being developed that will enable researchers and managers to compare the results from numerous turbine studies.

In order to compare the results of different turbine/wildlife impact studies, it is important that the methodologies used in different studies are comparable to one another. By encouraging turbine developers to perform studies that follow the draft guidelines, inter-study comparisons will now be much more useful. I was happy to see that the CEC took the approach of being quite specific in its descriptions of different research methodologies. This level of detail provides both those familiar and those unfamiliar with the body of turbine/wildlife research to bring themselves quickly up to speed on the means by which thorough wildlife studies can be completed at turbines.

My one major disappointment in the document relates to the recommended durations of pre-permitting and operations monitoring. In both cases, the guidelines recommend that monitoring occur for a period of 2 years. I believe that this is moving turbine-related research in the right direction but doesn't go far enough. It is important that wildlife studies at turbine sites occur over multiple seasons and span multiple years so that any inter-seasonal or inter-annual variation in wildlife activity and/or mortality is captured in the data. Yet if just 2 years of data are collected, there is a potential problem. Should 2 years of data be collected and there is inter-annual variability, researchers will be unable to evaluate which year was the exception and which year was the norm. Instead, a minimum of 3 years of data should be collected so that in the event that data differs between the first 2 years, the third year can be used to evaluate which represents the norm.

This is why I have always recommended a *minimum* duration of 3 years for pre-permitting monitoring and 3 years for operations monitoring. Because these are *voluntary* guidelines, stakeholders should not object to that recommendation.

As my own doctoral research at the University of California at Davis explored the effects of turbine-generated noise on small mammals living on the ground beneath strings of wind turbines, I look forward to a time when the CEC will also begin to explore the effects of turbines on animals living beneath turbines. As you know, my research found that small mammals living beneath turbines display behavioral shifts in response to turbine noise. Other impacts may also occur. Yet without more research, one cannot say for certain.

Take care,
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