



California Wind Energy Association

April 5, 2010

Sandra Rivera, CDA
Alameda County Planning Department
224 W. Winton Avenue, Rm. 111
Hayward, CA 94544

Dear Sandi,

The California Wind Energy Association (CalWEA) is currently seeking California wind projects that will work closely with CalWEA on a scientific research project leading to improved estimates of avian and bat mortality at wind facilities. After extensive discussions with NextEra Energy Resources (NextEra), we believe that the Altamont Pass Wind Resource Area (APWRA) provides an excellent study habitat. NextEra and the other APWRA wind companies participating in the Alameda County Monitoring Team surveys have agreed to provide space for housing the birds and bats used in the study, as well as access to their sites. The ability to “piggy-back” on the monitoring efforts taking place at the Altamont would enable our research dollars to go much further, and would also produce research results that would complement ongoing scientific efforts to understand avian and bat mortality at the Altamont. We hope that you and the Scientific Review Committee (SRC) guiding current environmental studies at the Altamont will agree to support our effort. Below, we provide a brief outline of the intended study, and describe our current understanding of how CalWEA investigators would interact with the ongoing Alameda County Monitoring Team surveys at the APWRA.

Our project, funded by the California Energy Commission (CEC), seeks to advance the approaches for mortality estimation published in the *California Guidelines for Reducing Impacts to Birds and Bats from Wind Energy Development* (October 2007). The *Guidelines* provide an equation that can be used to adjust the number of birds (or bats) that are found during an environmental mortality survey of a wind facility for survey error. The CEC equation (as well as other equations in the literature) results in an adjusted count that incorporates the error associated with the ability of an observer to detect a bird (or bat), and the probability of scavenger removal. This project will evaluate the accuracy and precision of existing mortality monitoring calculations (e.g., the CEC equation and others available in the literature) for estimating the “true” mortality at wind turbine sites, and will result in additional statistical models and techniques that can be implemented at operational wind facilities during standard ecological monitoring surveys. The objectives of our project follow:

- a. Generate data using a rigorous field-based experimental design from which existing and new methods for estimating survey error can be tested or derived.
- b. Evaluate the accuracy and precision of existing equations using the field data and develop additional models and equations for estimating true bird and bat mortality.
- c. Generate guidance for conducting site-based experiments leading to the estimation of survey error, and estimation of site-specific mortality.

Our proposed experimental design is intended to take advantage of the ongoing monitoring activities and monitoring team schedule at the APWRA. Our design consists of a series of experiments that will be implemented over the course of multiple months. For any one experiment, the Study Director (a CalWEA paid staff person with an ecology background) will place (unknown to the monitoring team) a fixed number of uniquely marked birds or bats at selected strings prior to sampling by the monitoring team. At any point in time, no more than two strings will be incorporated into the experiment, thereby minimizing impacts on natural predation and scavenging activities. For the same reason, the selected strings will not be in close proximity. The Study Director will visit the string daily prior to arrival of the monitoring team, and record the scavenging at the string. The monitoring team will be asked to identify the birds and bats as "study carcasses" (but not to collect all the attributes of the remains) when found as a part of their normal activities. We anticipate that simply recording the presence or absence of a bird or bat will require an insignificant amount of time and will not interfere with the monitoring schedule. We anticipate that our final design will result in many days when no marked animals are available for observation. The objective is to keep the presence or absence of the marked animals confidential, and not to change the inherent ecological conditions at the site.

The experimental design for our study is not final, although many of the key attributes have been extensively discussed. We propose to implement a pilot study based our initial design to evaluate our field management of the experiments, and test many aspects of the design. The information will be used to refine all aspects of the data collection activities. Based on the information gained during the pilot study, we intend to modify our initial design and anticipated schedules to minimize any burden on the existing Alameda County Monitoring Team surveys. This field test could be conducted in the next few weeks, with your authorization, particularly if it would aid your decision whether to lend the monitoring team's support for this project.

We do not believe that our intended research will impact or restrict the current monitoring activities at the APWRA. In addition, the results from our study would be informative in the analysis of future data environmental assessments. We intend to make the study results available to the SRC, wind companies at the Altamont, and other interested stakeholders after our research is completed. Please note that a Project Advisory Committee (PAC) has been formed for our project and will oversee the research design and data analysis. However, as we firm up the study details, we would encourage constructive comments from the SRC or other parties involved in the Altamont assessment.

We look forward to discussing our proposal with you, the SRC, or other interested parties, and request a definitive response to our proposal no later than Friday, April 23, or following the conclusion of the pilot study if that study is authorized. Our anticipated start date for the full research project is June of 2010. Prior to starting the full study, we are required to gain approval from the study's Project Advisory Committee.

Sincerely,

A handwritten signature in black ink, appearing to read "Nancy Rader". The signature is fluid and cursive, written in a professional style.

Nancy Rader
Executive Director