



United States Department of the Interior

Fish and Wildlife Service



Bloomington Field Office (ES)
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September 6, 2016

Mr. Jim Eisen
Orion Renewable Energy Group LLC
155 Grand Avenue, Suite 706
Oakland, California 94612
jeisen@orionrenewables.com

Dear Mr. Eisen:

A meeting was held on August 1, 2016 to discuss development of the proposed Jordan Creek Wind Farm Benton and Warren Counties. Attendees at the meeting included representatives from Orion Wind Resources LLC, Western EcoSystems Technology, Inc. (WEST), the Indiana Department of Natural Resources, and the U.S. Fish and Wildlife Service (Service). WEST provided the attendees with a meeting summary on August 25, 2016.

This letter acknowledges that biologists from the Service did attend the meeting held at the Service's Bloomington, IN Field Office. The Service supports wind power development as an alternative energy source, however wind power facilities can have negative impacts on wildlife and their habitats if not sited and designed with potential wildlife and habitat impacts in mind. Selection of the best sites for turbine placement is enhanced by ruling out sites with known high concentrations of birds and/or bats passing within the rotor swept area of the turbines or where the effects of habitat fragmentation will be detrimental. In support of wind power generation as a wildlife friendly, renewable source of power, development sites with comparatively low bird, bat, and other wildlife values, are preferable and would have relatively lower impacts on wildlife.

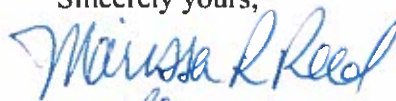
Recent studies at commercial wind farms have shown that wind turbines can be detrimental to wildlife in some situations. Species of greatest concern in Indiana are migratory birds, which are protected under the federal Migratory Bird Treaty Act, and bats, including Indiana bats and northern long-eared bats which are protected under the Endangered Species Act (ESA). Potential impacts of wind turbines include mortality from blade strikes and displacement of some bird species due to aversion to towers.


Indiana and northern long-eared bat mortalities from wind turbine collisions have been documented during spring migration, summer, and fall migration seasons over the last several years. These mortalities confirm the concerns of the community of scientists who study bats that Indiana bats and northern long-eared bats, like other species, are susceptible to mortality at wind turbines. Most bat fatalities at turbines occur during late summer and autumn, suggesting that

bats may be particularly susceptible during fall migration. While there are insufficient data to assess seasonal patterns of mortality of Indiana and northern long-eared bats at wind facilities, based on data from other species we suspect that Indiana bats may also be at highest risk during migration, when migrating between summering areas and winter hibernacula. These migrations occur throughout the range of the species. Due to the potential of take during spring and fall migration, we recommend that developers and operators of wind energy facilities within the range of the species, which includes all of Indiana, evaluate their exposure to the prohibitions of ESA.

For further discussion please contact Marissa Reed at (812) 334-4261 ext. 1215 or marissa_reed@fws.gov.

Sincerely yours,




Scott E. Pruitt
Field Supervisor