



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
420 South Garfield Avenue, Suite 400
Pierre, South Dakota 57501-5408



November 29, 2016

Melissa Schmit
Crocker Wind Farm, LLC
7650 Edinborough Way
Suite 725
Edina, Minnesota 55435

Re: Crocker Wind Farm Revised Project
Boundary, Clark County, South Dakota

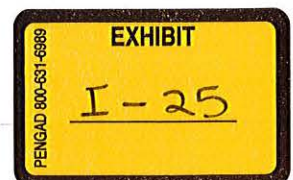
Dear Ms. Schmit:

This letter is in response to your request dated October 27, 2016, for environmental comments regarding the above referenced boundary expansion of the proposed Crocker Wind Farm project. As mapped, the expansion is an approximately 3 x 4 mile area immediately north of South Dakota Highway 20, Clark County, South Dakota, immediately adjacent to the previous project area's northern boundary.

The information and recommendations provided in our letter to you dated May 18, 2016 regarding the Crocker Wind Farm also apply to the project expansion area.

In that May 2016 letter, we raised concern regarding the existence of numerous U.S. Fish and Wildlife Service (Service) easements at the project site, which are an indication of relatively high wildlife value of the habitat in this area. The expansion area also contains contiguous Service easements. It appears, based on aerial photo review of the expansion area, that the habitat is comprised mainly of grasslands with a high number of wetlands intermixed, as is the case in much of the remaining Crocker Wind Farm proposed project area. We have estimated, based on turbine layouts you have provided that 41% of turbines comprising the Crocker Wind Farm are proposed to be installed on native prairie. Some wildlife species can adapt to a variety of grassland types, but native prairies are of particular importance due to their increasing rarity; the continued loss of native prairies imperils many species, including crucial pollinators like the Dakota skipper (see below), that cannot survive without intact prairie ecosystems. Additionally, true restoration of these areas post-disturbance is highly difficult if not impossible, thus native prairie impacts cannot fully be rectified.

We reiterate our foremost recommendation regarding wind projects in South Dakota, relayed to you during our initial meeting and in several contacts and correspondences thereafter: avoid and minimize impacts to grasslands to the greatest extent possible.



Recommendations from our office, the Waubay Wetland Management District office, and our agency guidelines (Land-based Wind Energy Guidelines and Eagle Conservation Plan Guidance) are intended to provide means to evaluate wind energy projects for the risk of potentially adverse impacts. The resulting wildlife and habitat information are to be used during project planning to avoid and minimize those impacts. **In some cases, it is appropriate to abandon project areas due to high risk to wildlife.**

The Crocker Wind Farm is located in a grassland/wetland complex used by numerous grassland nesting species, and has been identified as a high-use area for waterfowl with more than 100 breeding birds per square mile. Grassland nesting species, including species identified in our *2008 Birds of Conservation Concern* (<https://www.fws.gov/migratorybirds/pdf/grants/BirdsofConservationConcern2008.pdf>) will be directly and indirectly impacted by placement of turbines, access roads and other project facilities on the landscape. As you know, we recommend offsetting measures for any turbines placed within grasslands to compensate for avoidance behavior by grassland nesting birds, which may avoid the structures by 300 m or more (approximately a 70 acre circle around each turbine) (Shaffer and Buhl 2015). The area also attracts many shorebird and waterbird species due to the high number of basins in the area, and while project facilities may not directly impact these habitats, they are likely to negatively affect wildlife that uses the wetlands.

Risks posed to eagles nesting near the Crocker project area may increase if the proposed expansion area is developed. Per your 2016 raptor nest survey report, two active bald eagle nests were located during preconstruction surveys: one 5.4 miles northeast and the other 6.2 miles north of the old project boundary. Expanding the project area into the 3 x 4 mile area north of the old boundary places turbines closer to those nests, and the revised boundary also expands the 10-mile buffer within which we recommend surveying for eagle nests. **Additional surveys would be needed to detect any eagle nests within the new 10 mile buffer.**

Listed species may be at risk as well. Although surveys have not been conducted in the area to detect Dakota skippers or Poweshiek skipperlings, a minimum of 62 areas totaling 162.5 acres of suitable habitat for these species were documented during preconstruction habitat surveys, and many portions of the project area have yet to be evaluated for suitability. As noted above, Dakota skippers – as well as the Poweshiek skipperlings – rely on native prairie habitats.

Federally endangered whooping cranes have been documented moving through the area. The Aransas/Wood Buffalo flock that migrates through South Dakota each spring and fall is the only self-sustaining wild population of these birds in existence. The birds do not breed in South Dakota. Although they are most often sighted in counties near the Missouri River, whooping cranes are known to occur in both far eastern and western portions of the South Dakota. We currently recommend that spring and fall monitoring for migrating whooping cranes occur at wind projects within the whooping crane migration corridor (which widens in South Dakota based on state-specific records – see enclosed map). If cranes are sighted near the project, turbine operations are then shut down to preclude collision mortality. This is described in the Upper Great Plains Programmatic Environmental Impact Statement which may be utilized for development of the Crocker Wind Farm.

In short, the Crocker Wind Farm appears to be in a high wildlife use area and the proposed boundary expansion appears to exacerbate, rather than alleviate, direct and indirect risks posed to wildlife should the project be constructed as currently proposed.

We reiterate from our May 2016 letter, our policy relative to migratory birds: the Migratory Bird Treaty Act prohibits the taking, killing, possession, and transportation, (among other actions) of migratory birds, their eggs, parts, and nests, except when specifically permitted by regulations. While the MBTA has no provision for allowing unauthorized take, the Service realizes that some birds may be killed during operation of the Crocker Wind Farm even if all known reasonable and effective measures to protect birds are used. The Service's Office of Law Enforcement carries out its mission to protect migratory birds through investigations and enforcement, as well as by fostering relationships with individuals, companies, and industries that have taken effective steps to avoid take of migratory birds, and by encouraging others to implement measures to avoid take of migratory birds. It is not possible to absolve individuals, companies, or agencies from liability even if they implement bird mortality avoidance or other similar protective measures. However, the Office of Law Enforcement focuses its resources on investigating and prosecuting individuals and companies that take migratory birds without identifying and implementing all reasonable, prudent and effective measures to avoid that take. Companies are encouraged to work closely with Service biologists to identify available protective measures when developing project plans and/or avian protection plans, and to implement those measures prior to/during construction, operation, or similar activities.

If changes are made in the project plans or operating criteria, or if additional information becomes available, the Service should be informed so that the above determinations can be reconsidered.

The Service appreciates the opportunity to provide comments. If you have any questions on these comments, please contact Natalie Gates of this office at (605) 224-8693, Extension 227.

Sincerely,



Tur Scott Larson
Field Supervisor
South Dakota Field Office

Enclosure

Cc: Waubay WMD; Waubay, SD
(Attn: Connie Mueller)
SDGFP; Pierre, SD
(Attn: Silka Kempema)