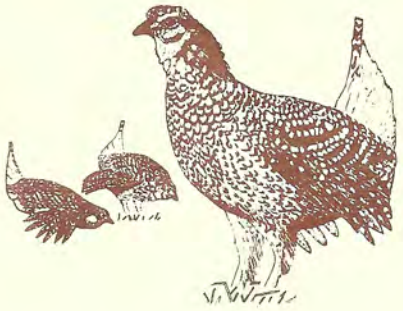
North Dakota Chapter

THE WILDLIFE SOCIETY



November 14, 2017

Darrell Nitschke
North Dakota Public Service Commission
600 E. Boulevard, Dept. 408
Bismarck, ND 58505-0480

Dear Mr. Nitschke:

Please accept this letter as a filing for inclusion in the public record on the siting application for Xcel Energy's and NextEra Energy's (NEE) proposed Foxtail Wind Project in Dickey County, PU-17-284. The North Dakota Chapter of The Wildlife Society (Chapter) is generally supportive of the wind industry as a renewable source of energy that can be produced locally. The Chapter has been monitoring the growth of the industry in the state since the industry's inception here, as well as staying apprised of research that has evaluated the impact of wind facilities on wildlife. When the wind industry first moved into North Dakota in 2003, very little research had been conducted that could guide turbine siting with respect to environmental impacts, but that has changed. A growing body of scientific evidence indicates that wind facilities have detrimental impacts to wildlife.

A ten-year study conducted in Dickey County by the U.S. Geological Survey's Northern Prairie Wildlife Research Center in Jamestown, ND, clearly showed that wind facilities cause displacement of grassland breeding birds, birds whose populations have been plummeting for decades, including species like the state bird, the Western Meadowlark. The research occurred on Acciona's Tatanka Wind Facility, with reference sites occurring within the boundaries of the Foxtail project. This research, published in the highly regarded international scientific journal *Conservation Biology*, was exemplary in terms of the duration of the study and the strength of the study design. The research clearly shows that 7 of 9 grassland bird species avoided wind farms in this area. NEE partially funded this study, so the company should well be aware of the detrimental impacts of building Foxtail Wind.

Two other studies that occurred on Tatanka and NEE's Kulm/Edgeley wind farm further showed detrimental impacts to wildlife. This research, conducted by the U.S. Fish and Wildlife Service's Habitat and Population Evaluation Team in Bismarck, ND, showed that waterbirds like the Black Tern and Marbled Godwit showed a tendency to decline near these two wind farms. Furthermore, five species of dabbling ducks exhibited an average decline of 20% after the erection of turbines on the Tatanka and Kulm/Edgeley wind farms. These species include the Mallard, Northern Pintail, Northern Shoveler, Blue-winged Teal, and Gadwall, all species important to North Dakota's reputation as the "duck factory of North America." Imagine 20% fewer ducks of these species in Dickey County and surrounding counties -- and what that means for the quality of North Dakotans' hunting opportunities in this area, as well as the impact on tourism as out-of-state hunters seek other hunting grounds.

Foxtail Wind is located in an area vital to a diverse array of wildlife species, including not just grassland birds and waterfowl, but also pheasants, small-game, deer, and potentially federally listed threatened and endangered species such as the Whooping Crane, Piping Plover, and Northern Long-eared Bat. Deaths to these species from turbine strikes and barotrauma are subject to formal federal government "take" proceedings. Unauthorized "take" of any migratory bird is prohibited under federal law, unless such anticipated take has been coordinated in advance with the U.S. Fish and Wildlife Service. Has the company coordinated their proposal with the U.S. Fish and Wildlife Service to ensure that unauthorized "take" of these species does not occur? If so, what was the outcome?

In addition to the threat posed to North Dakotan's wildlife, Foxtail Wind would be located in one of the last stands of contiguous mixed-grass prairie, **a highly endangered ecosystem**, along the southern Missouri Coteau in North Dakota. Thus, the placement of Foxtail Wind contributes to a downward spiral in the loss of our natural heritage. From 2008-2012, North Dakota and South Dakota experienced the greatest amount of new cultivation out of all the rest of the states in the U.S. Corn Belt. The greatest source of this new cultivation was grasslands, and not just CRP that came out of production, but also native prairie of the endangered mixed-grass prairie ecosystem that had never been converted. Ranchers are already feeling the economic hit as pasture (in most cases, native mixed-grass prairie) and hayland become ever scarcer. An annual survey funded by the ND Department of Trust Lands revealed that the average rent for pasture in Dickey County during the five-year period 2008-2012 was $29.40 per acre; that number increased to $35 for the five-year period 2011-2015. Factoring in the current economic stability of the cattle market, one might expect that number to keep climbing as pasture continues to be converted to cropland and other non-pasture uses.

Foxtail Wind is an example of a pattern we suspected would come, and have been watching for since the wind industry arrived in North Dakota. That is the pattern of several "small" projects in the same vicinity becoming, in essence, one giant wind industrial complex, but because of current state regulations, the combined facilities' biological effects could accumulate without the benefit of regulatory review. The Chapter strongly believes that each new wind facility should be considered in the context of other existing and planned projects in the region. This consideration of cumulative effects should include *all* other anthropogenic impacts in the area, including such things as additional transmission lines, roads, and other types of infrastructure that may or may not be unrelated to wind facilities. Whether or not the aforementioned projects will have minimal impact on the environment cannot be ascertained without a cumulative impact analysis. The projects of Tatanka Wind and Foxtail Wind combine to form a contiguous 185-tower industrial complex, with EDF's Merricourt Project of 75 turbines and Kulm/Edgeley Project of 41 turbines in very close proximity. However, the cumulative impacts of this industrial complex are not being considered. Whereas one wind facility may have a relatively moderate negative influence on wildlife, the accumulation of numerous wind facilities built in the same area may begin to break down species' thresholds of tolerance to disturbances, and result in significant population declines.

For the reasons stated above, the Chapter is most supportive of wind facilities that are placed in habitats of limited conservation value to wildlife, such as cropland in predominantly agricultural landscapes. In areas where turbine placement on grasslands is unavoidable, the Chapter urges mitigation in ratios exceeding 1:1. That is to say, for every acre of grassland destroyed, more than an acre should be restored or protected. Native prairie should receive the highest mitigation ratio, followed by planted grasslands.

The Chapter realizes that there is no established system in North Dakota for grassland mitigation for wind facilities. However, although no mitigation has been provided to date for grassland impacts, there are examples of voluntary conservation measures for impacts to endangered Whooping Cranes. Basin Electric Power, BP Alternative Energy and Clipper WindPower Development (for a jointly owned South Dakota project), and NEE have already committed to voluntary conservation measures for impacts to Whooping Cranes. The Chapter applauds these efforts. The USGS team in Jamestown that discovered the displacement of grassland birds in Dickey County on the Tatanka Wind Farm and the USFWS team in Bismarck that discovered displacement of breeding waterfowl and waterbirds in that same area have both developed mitigation tools that allow wind developers to assess the impact of their facilities with a mind toward compensation of impacts. We would be happy to connect wind developers with these entities so that compensatory measures can be discussed.

Because the Chapter's members are wildlife professionals, the Chapter would be happy to engage wind developers in discussions about our concerns, as well as serving in an advisory capacity.

Sincerely,

Rick Nelson
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The Wildlife Society is an international, nonprofit, scientific and educational organization composed of professionals, students, and laypersons active and interested in wildlife research, management, education and administration. The NDCTWS is an active affiliate. It is specifically concerned with approaches to effective management of North Dakota's plant and animal communities. The Chapter provides expertise in advising legislative and judicial processes surrounding the controversial management of many natural resource assets. It advocates the holistic treatment of environmental questions. The Chapter was founded in 1963 and incorporated in 1981 under the laws of North Dakota. The NDCTWS would be very willing to engage the PSC in issues concerning wildlife impacts from wind facilities, as well as offer advice based on member's expertise in matters of wildlife management and impacts of human-derived disturbances.