



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
3425 Miriam Avenue
Bismarck, North Dakota 58501



RECEIVED

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Public Service Commission
600 East Boulevard, Dept. 408
Bismarck, North Dakota 58505

PUBLIC SERVICE COMMISSION

Dear Commissioners Clark, Cramer, and Kalk:

The U.S. Fish and Wildlife Service (Service) has received the March 11, 2009, State of North Dakota Public Service Commission (PSC) Notice of Filing and Notice of Hearing for Case No. PU-09-84, regarding the proposed Rough Rider Wind I, LLC (Rough Rider) - Wind Farm Development in Dickey County, North Dakota. The proposed project includes development of a 175-megawatt (MW) wind energy center with up to 116 turbines and associated facilities. We offer the following comments under the authority of and in accordance with the Migratory Bird Treaty Act (16 U.S.C. 703 et seq.), Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668-668d, 54 Stat. 250), the Endangered Species Act (ESA) (16 U.S.C. 1531 et seq.), and the National Wildlife Refuge System Improvement Act of 1997 (Public Law 105-57).

The U.S. Fish and Wildlife Service (Service) holds certain resources in trust and manages them for the benefit of the American people. These resources include migratory birds, inter-jurisdictional fish, federally-listed threatened and endangered species of plants and animals and their habitats, and units of the National Wildlife Refuge system. One goal of Service policy is that conservation of fish and wildlife resources receive equal consideration with other features of resource development, and that conservation actions are coordinated with those other forms of development. Another goal is to conserve, protect, and enhance fish and wildlife and their habitats, and to facilitate the balanced development of the Nation's natural resources. When planning an activity, project proponents should give careful consideration to potential impacts to these trust resources and compliance with the laws mentioned above. Additional information is provided below.

In a February 4, 2009, letter (enclosure 1), the Service provided comments and recommendations to Rough Rider's consultant Tetra Tech EC, Inc. These were developed to avoid, reduce, and mitigate potential impacts to fish and wildlife resources that may be adversely affected by the proposed wind development project. In general, wildlife resources and issues that warrant consideration during project planning for wind energy facilities include: migratory birds and bats (e.g., potential for habitat fragmentation, collisions and electrocutions); Federal land interests; wetlands, prairie, and woodland habitats; threatened and endangered species; and monitoring, research, and assessment. To date, the Service has not received a response from Rough Rider of how or whether they intend to implement our recommendations.

27 **PU-09-84** Filed: 5/1/2009 Pages: 11
Letter re. Project Impacts

The Migratory Bird Treaty Act (Act) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Department of the Interior. While the Act has no provision for allowing unintentional take, the Service realizes that some birds may be killed by wind turbines or power lines even if all reasonable measures to protect them are used. The Service's Office of Law Enforcement (OLE) 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 minimize their impacts on migratory birds, and by encouraging others to enact such programs. It is not possible to absolve individuals, companies, or agencies from liability even if they implement avian mortality avoidance or similar conservation measures. However, OLE focuses its resources on investigating and referring individuals and companies for prosecution that take migratory birds without regard for their actions or without following recommendations such as this to avoid take. To date, Rough Rider has not coordinated with the Service to develop methods and procedures to help ensure that their project construction and operation will not result in the take of migratory birds.

The Service provided Tetra Tech with a list of federally threatened and endangered species that may occur within the proposed project's area of influence, including the endangered whooping crane. Section 10(a)(1)(B) of the Endangered Species Act (ESA), (16 U.S.C. 1531 et seq.) allows non-Federal parties planning activities that have no Federal nexus (a Federal nexus exists whenever an activity is conducted, funded, or licensed or permitted by a Federal agency), but which could result in the incidental taking of listed animals, to apply for an Incidental Take Permit (ITP) prior to project construction. The permit application must include a Habitat Conservation Plan (HCP) that lays out the proposed actions, a determination of the effects of those actions on affected federally-listed fish and wildlife species and their habitats (often including proposed or candidate species), and a description of the measures that the applicant will take to avoid, minimize, and offset adverse effects. To date, Rough Rider has not indicated how or whether they intend to ensure that their project will not take a threatened or endangered species.

Thank you for the opportunity to comment on this Notice of Filing and Notice of Hearing. If you require further information, please have your staff contact Terry Ellsworth of my staff, or contact me directly, at (701) 250-4481, or at the letterhead address.

Sincerely,



Jeffrey K. Towner
Field Supervisor
North Dakota Field Office

Enclosure

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2-4-0

Ms. Anne-Marie Griger, AICP
Tetra Tech EC, Inc.
7800 Shoal Creek Boulevard, Suite 253 East
Austin, Texas 78757

Dear Ms. Griger:

This is in response to your December 2, 2008, request for environmental information in relation to an investigation into a potential wind energy development project in Dickey County, North Dakota. The location for the proposed project is approximately 7 miles northwest of Forbes in Dickey County. The proposed project will be for development of an approximately 175-megawatt (MW) wind energy center and an associated 16 mile long 230-kilovolt (kV) transmission line. No information was provided as to the specific location, number, or size of wind turbines that may be constructed. Therefore, our comments are general in nature. We offer the following comments under the authority of and in accordance with the Migratory Bird Treaty Act (16 U.S.C. 703 et seq.), Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668-668d, 54 Stat. 250), Executive Order 13186 "Responsibilities of Federal Agencies to Protect Migratory Birds", the Endangered Species Act (ESA) (16 U.S.C. 1531 et seq.), the National Wildlife Refuge System Improvement Act of 1997 (Public Law 105-57), and the National Environmental Policy Act (NEPA).

The U.S. Fish and Wildlife Service (Service) holds certain resources in trust and manages them for the benefit of the American people. These resources include migratory birds, inter-jurisdictional fish, federally-listed threatened and endangered species of plants and animals and their habitats, and units of the National Wildlife Refuge system. One goal of Service policy is that conservation of fish and wildlife resources receive equal consideration with other features of resource development, and that conservation actions are coordinated with those other forms of development. Another goal is to conserve, protect, and enhance fish and wildlife and their habitats, and to facilitate the balanced development of the Nation's natural resources. When planning an activity, project proponents should give careful consideration to potential impacts to these trust resources and compliance with the laws mentioned above. Additional information is provided below.

Migratory Birds

Adequate consideration for avian and other wildlife resources early in the site evaluation process can help to minimize impacts and facilitate project review. Although current wind turbine

technology and proper siting can help to minimize the incidence of avian and bat deaths due to blade, aerial line, and tower strikes, the potential for direct mortality of some migratory birds will remain. Wind power developers, in concert with the Service, can help to ensure that projects proceed with as little impact to migratory birds as possible. This can be accomplished by gathering information on avian resources as they relate to project siting, and by implementing measures to minimize impacts to migratory birds from the construction and operation of the wind facility. The Service's Interim Wind Turbine Siting Guidelines are enclosed to assist in project planning (enclosure 1). We encourage the project proponents to conduct a Potential Impact Index (PII) analysis on several potential sites within wind resource areas to assist in the selection of a wind power site that minimizes the potential to impact migratory birds. Please inform this office whether or not you plan to use the Service's interim guidelines in selecting your site and if not, whether you intend to use a different method to assess avian and other wildlife resources.

The Service has coordinated with the Avian Power Line Interaction Committee (APLIC) to develop guidelines to assist companies in formulating Avian Protection Plans (APP). These plans are utility-specific and designed to reduce operational risks that result from avian interactions with electric utility facilities, but we suggest they may be adapted to wind energy facilities as well. We encourage the project developer of the proposed wind energy facility to investigate the formulation of an APP. The guidelines can be accessed from APLIC's website at <http://www.aplic.org/>.

To minimize the electrocution hazard to birds, the Service, with support from the Rural Utilities Service, recommends that new or updated overhead power lines be constructed in accordance with the current guidelines for preventing raptor electrocutions. The recommended guidelines can be found in "2006 Suggested Practices for Avian Protection on Power Lines". To increase power line visibility and reduce bird fatalities resulting from collisions with power lines, the Service recommends all new power lines that cross or run adjacent to rivers or large wetlands be modified according to "Mitigating Bird Collisions with Power Lines: The State of the Art in 1994". Both publications can be obtained by writing or calling the Edison Electric Institute, P.O. Box 266, Waldorf, Maryland 20604-0266, (1-800-334-5453) or visiting their website at www.eei.org.

The Migratory Bird Treaty Act (Act) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Department of the Interior. While the Act has no provision for allowing unauthorized take, the Service realizes that some birds may be killed by wind power towers or power lines even if all reasonable measures to protect them 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 minimize their impacts on migratory birds, and by encouraging others to enact such programs. It is not possible to absolve individuals, companies, or agencies from liability even if they implement avian mortality avoidance or similar conservation measures. However, the Office of Law Enforcement focuses its resources on investigating and prosecuting

individuals and companies that take migratory birds without regard for their actions or without following recommendations such as this to avoid take. The Service cooperates with developers to minimize impacts to migratory birds and to Bald and Golden eagles. Parties who wish to receive assurances that discretion will be exercised in not enforcing against them can work to implement all practicable measures to avoid and minimize impacts to migratory birds, their eggs, and active nests.

To avoid impacts to migratory birds or other wildlife during the breeding season (February 1 to July 15), schedule construction for late summer or fall/early winter. If work is proposed to take place during the breeding season or at any other time which may result in the take of migratory birds or active nests, the Service recommends that the project proponent arrange to have a qualified biologist conduct a field survey of the affected habitats to determine the absence or presence of nesting migratory birds. If nesting migratory birds are found, we request you contact this office, suspend construction, or take other measures, such as maintaining adequate buffers, to protect the birds until the young have fledged. The Service further recommends that field surveys for nesting birds, along with information regarding the qualification of the biologist(s) performing the surveys, and any avoidance measures implemented at the project site be thoroughly documented, and that such documentation be shared with the Service and maintained on file by the project proponent at least until such time as construction on the proposed project has been completed.

Threatened and Endangered Species

A list of Federally threatened and endangered species that may occur within the proposed project's area of influence is enclosed (enclosure 2). This list fulfills requirements of the Fish and Wildlife Service under the Endangered Species Act.

If a Federal agency authorizes, funds, or carries out a proposed action, the responsible Federal agency, or its delegated agent, is required to evaluate whether the action "may affect" listed species. If the Federal agency determines the action "may affect" listed species, then the responsible Federal agency shall consult with this office. If the evaluation shows a "no effect" determination on listed species, further consultation is not necessary. If a private entity receives Federal funding for a construction project, or if any Federal permit is required, the Federal agency may designate the fund recipient or permittee as its agent for purposes of section 7 consultation.

Section 10(a)(1)(B) of the ESA allows non-Federal parties planning activities that have no Federal nexus, but which could result in the incidental taking of listed animals, to apply for an incidental take permit. (A Federal nexus exists whenever an activity is conducted, funded, or licensed or permitted by a Federal agency). The application must include a habitat conservation plan (HCP) laying out the proposed actions, determining the effects of those actions on affected federally-listed fish and wildlife species and their habitats (often including proposed or candidate species), and defining measures to minimize and mitigate adverse effects.

The Aransas Wood Buffalo Population (AWBP) of whooping cranes is the only self-sustaining migratory population of whooping cranes remaining in the wild. These birds breed in the wetlands of Wood Buffalo National Park in Alberta and the Northwest Territories of northern Canada, and overwinter on the Texas coast. Whooping cranes in the AWBP annually migrate through North Dakota during their spring and fall migrations.

Endangered whooping cranes have been documented using stopover habitat in the vicinity of this proposed wind resource area. The proposed wind project area is located outside of that portion of the whooping crane migration corridor that includes 95% of all confirmed whooping crane sightings in North Dakota (enclosure 3). The presence of suitable roosting and feeding habitat for whooping cranes document the potential for whooping crane presence in the proposed project area. A wind energy project in this wind resource area has the potential to affect whooping cranes during their annual spring and fall migration through North Dakota. Potential effects may be direct (e.g. collision mortality) or indirect (e.g. avoidance of the site resulting in cranes seeking alternate habitat). The interactions of whooping cranes with wind turbines and wind farms are currently not fully known, although it is expected that these large birds with relatively low maneuverability are susceptible to mortality via collisions with turbines. Currently, collisions with power lines are the greatest known source of mortality for fledged whooping cranes and have accounted for the death or serious injury of at least 46 whooping cranes since 1956.

For construction of new overhead power lines located within the outer portion of the whooping crane migration corridor (75 - 95 percent of confirmed sightings) where your investigation area is located, the Service recommends that the new line be buried to avoid whooping crane and other bird collision mortality. If the new power line cannot be buried, we recommend that all new line located within one mile of wetland stopover habitat and an equal distance of existing power line within one mile of wetland stopover habitat be marked with state-of-the-art visual line marking devices to minimize the potential for whooping crane collision mortality.

The Service does not believe that a determination of “no effect” is appropriate for this wind resource area because of, but not limited to, the potential for migrating whooping cranes to use migration stopover habitat in this area.

Fish and Wildlife Service Property Interests

The Service administers Waterfowl Production Areas owned in fee title as well as wetland and grassland easements throughout North Dakota. A review of Service realty records indicates Service property interests are located in the planning area. Mr. Mick Erickson, Project Leader, Kulm Wetland Management District, 1 First Street SW, P.O. Box E, Kulm, North Dakota 58456, (701-647-2866), has been contacted by Westwood Professional Services to obtain specific information relative to Service easements and up to date realty records for the proposed project area.

Following are some suggestions and explanations of the various land interests the Service is responsible for in the proposed project area. Wetland easements are legal agreements with private landowners that permanently protect wetland basins from being drained, burned, leveled, or filled. Grassland easements are legal agreements with landowners that permanently protect grassland vegetation, primarily native prairie, from being destroyed or developed. These easements prevent these grasslands from being converted to cropland. Mowing, haying, and grass seed harvesting must be delayed until after July 15 each year.

The primary responsibility in protecting these easements is to review all proposed uses to ensure that the requests are compatible with Service easement regulations and various laws and policies. Therefore, these comments and suggestions are made in an attempt to accomplish three goals: 1) avoid impacts to Service grassland and wetland easements in the project area as much as possible; 2) if unavoidable, ensure that any proposed turbine and associated infrastructure impacts (roads, buried collection lines, transmission lines, sub-stations, etc.) on any Service easement areas are kept to an absolute minimum; and 3) investigate all potential alternatives to eliminate or reduce impacts to easement areas to protect the integrity of the easement. With these goals in mind, the Service offers the following comments:

- **Grassland Easements:** The Service manages a number of grassland easements in the proposed project area. Without a map showing the proposed turbine and road locations, it is not possible at this time to identify specific concerns with turbines and roads. Building turbines on grassland easements will require a discussion about a variety of administrative procedures that will need to be completed to comply with various laws, policies, and regulations (NEPA documentation, compatibility determinations, restoration plans, decommissioning plans, replacement of impacted areas, a possible reimbursable agreement in support of Service expenditures for review, etc.). Refuge personnel will be available to meet in person to cover all these easement considerations in more detail once a more complete draft plan of the project layout is available. However, as with all other resource considerations, we urge you to discuss your plans with us prior to final site selection.
- **Wetland Easements:** The Service manages a number of wetland easements in the proposed project area. Without a map showing the proposed turbine and road locations, it is not possible at this time to identify specific concerns with turbines and roads. The National Wetlands Inventory (NWI) identifies many of the area's wetlands; however, many of the small, shallow, temporary wetland basins may not be recognized on NWI photography. You should make all reasonable efforts to avoid facility placement and disturbance to wetland easements. If your plans indicate a proposal to locate project facilities on Service wetland easements, the Service will review aerial photography along with field inspections to review construction stakes to make sure all wetland basins are avoided. In addition, it is important to make sure that access roads do not alter individual wetland basins and their individual watersheds.

- NEPA Review: As mentioned, if Service lands are proposed to be impacted, the Service will be required to conduct an analysis of impacts and examine alternatives, pursuant to NEPA.

High Value Habitat Avoidance

The proposed project area is located in the Missouri Coteau region of North Dakota and includes areas of native mixed-grass prairie. Since the 1800s, North Dakota has lost approximately 75 percent of its native grasslands, primarily due to crop production. The Service recommends avoiding construction or disturbance on native prairie areas.

Native prairie has significant natural resource values including:

- Provides habitat for a number of migratory and resident grassland birds whose populations are declining.
- Provides nesting habitat for millions of waterfowl.
- Contains 200-300 plant species, which provide genetic diversity important to agriculture and medicine.
- Provides habitat for thousands of insects, including the Dakota skipper, a candidate species for listing under the ESA, and other butterflies (Ex: Regal fritillary, Tawny crescent).
- Crucial for soil and water conservation.
- Provides recreational opportunities (hunting, bird watching/wildlife observation, hiking).
- Living laboratories for scientific research.

Our review of NWI maps indicate that wetland areas are located within the project area. NWI data can be accessed directly by visiting their website at (wetlands.fws.gov). Section 404 of the Clean Water Act regulates placement of fill materials in certain wetlands. A Corps of Engineers' 404 permit may be required if fill material will be placed in aquatic sites, including wetlands. Contact Mr. Dan Cimarosti, Regulatory Office, Corps of Engineers, 1513 South 12th Street, Bismarck, North Dakota 58504 (701-255-0015), to determine their permit requirements. If a 404 permit is required, the Service will provide recommendations on this project to the Corps.

Other high value wildlife habitat types in North Dakota include wooded draws and riparian forests. We recommend that you avoid construction of wind towers and appurtenant facilities in the above habitat types whenever possible.

Construction activities should be conducted in a manner that will minimize impacts to the wildlife and the existing habitat in the project area. To help avoid impacts, we recommend that you:

- Avoid construction in native prairie, if possible, and reseed disturbed native prairie with a comparable native grass/forb seed mixture. Obtain seed stock from nurseries within 250 miles of the project area to insure the particular cultivars are well adapted to the local climate.

- Minimize grassland disturbance by using fewer, larger turbines and limiting new road construction.
- Use underground transmission lines between turbines, as well as to the primary substation. If construction of overhead transmission lines are unavoidable, install and maintain appropriate visual line marking devices to reduce the potential for avian collision mortality.
- Design meteorological towers to be self standing (no guywires). If towers must be guyed, install and maintain appropriate visual line marking devices to reduce the potential for avian collision mortality
- Locate appurtenant facilities to avoid placement of fill in wetlands along the route.
- Install and maintain appropriate erosion control measures to reduce sedimentation and water quality degradation of wetlands and streams near the project area.
- Replace unavoidable wetland losses with functionally equivalent wetlands.

Wind developers, including power transmission companies, are encouraged to avoid impacts to prairie and other native habitats to the maximum extent practicable. Avoidance of impacts can be most effectively achieved by taking a landscape-scale view, beginning with the process of prospecting for suitable sites for wind power development. Companies should assess not only those factors that indicate favorable conditions for development, such as a consistent wind resource, access to transmission, willing landowners, available financing, etc., but also anticipated impacts to wildlife and their habitats. Equal consideration should be accorded to wildlife resource conservation as to other features of development. When considering a project in a particular wind resource area, companies should use all available tools to ensure they have taken all practicable steps to avoid impacts to native habitats. This can be accomplished by utilizing GIS products depicting significant areas of contiguous prairie to site development in areas that are already impacted or fragmented. This analysis and potential site comparison should be accomplished prior to making any significant financial commitments, including entering into lease agreements with landowners.

Research, Monitoring, and Assessment

We encourage project proponents to conduct collision monitoring studies designed to determine the effect of several factors, such as site selection, turbine designs, the layout of wind plants, wind plant operations, habitat alteration, and changes in available perching and nesting sites, on bird deaths. Annual reports outlining the results of these monitoring studies should be submitted to this office. The Avian Subcommittee of the National Wind Coordinating Committee (NWCC) has developed a guidance document to assist wind energy developers in designing studies that will produce credible and comparable results of avian interaction with wind power plants. The NWCC document, "Studying Wind Energy/Bird Interactions: A Guidance Document. Metrics and methods for determining or monitoring potential impacts on birds at existing and proposed wind energy sites," can be obtained by contacting the National Wind Coordination Committee, c/o RESOLVE, 1255 23rd Street, Suite 275, Washington, D.C. 20037, or by visiting their website at (www.nationalwind.org).

Given the Service requirements and recommendations above, as well as possible unforeseen issues that may arise, we encourage you to build sufficient planning time for coordination with the Service into your project timeline. Thank you for the opportunity to comment. If you require further information as project planning proceeds, please contact Terry Ellsworth of my staff, or contact me directly, at (701) 250-4481, or at the letterhead address.

Sincerely,

Jeffrey K. Towner
Jeffrey K. Towner
Field Supervisor
North Dakota Field Office

Enclosures (3)

cc: Project Leader, Kulm WMD
(Attn: M. Erickson)
Regulatory Office, Army Corps of Engineers, Bismarck
(Attn: D. Cimarosti)
ND Public Service Commission, Bismarck
Director, ND Game & Fish Department, Bismarck
(Attn: M. McKenna)

FEDERAL ENDANGERED SPECIES
FOUND IN DICKEY COUNTY
NORTH DAKOTA
February 2008

ENDANGERED SPECIES

Birds

Whooping crane (Grus Americana): Migrates through North Dakota counties during spring and fall. Prefers to roost on wetlands and stockdams with good visibility. Current flock size of the Aransas - Wood Buffalo migratory population is estimated to be 266 birds.

Mammals

Gray wolf (Canis lupus): Occasional visitor in North Dakota. Most frequently observed in the Turtle Mountains area.