



United States Department of the Interior

Fish and Wildlife Service

Ecological Services

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M.29/Wind Power

August 11, 2014

John Husar
Mud Springs Wind Project, LLC
6724 Hesper Road
Billings, Montana 59106

Dear Mr. Husar:

This is a follow-up letter to the July 21, 2014, meeting between yourself, Ryan Davis of Electrical Consultants, Inc, and Brent Esmoil and Jeff Berglund of my staff, regarding the proposed 240 MW Mud Springs Wind Project near Bridger, Montana. During the meeting, the U.S. Fish and Wildlife Service (Service) was provided a cursory review of the proposed project history, location, and schedule, with final turbine layout anticipated to occur within the next one to two months. Specific project information, such as copies of wildlife baseline study reports, the exact desired number and configuration of turbines, required ancillary facilities (roads, collector lines, substations, etc.), and detailed construction schedules were not provided.

As was discussed in the meeting, we remain concerned regarding the following issues:

- The Service was not consulted regarding the current proposed project location, trust resource concerns, or proposed wildlife baseline surveys, and at this stage appears to have little opportunity to meaningfully influence macro or micro siting decisions;
- The Service 2012 Land-Based Wind Energy Guidelines (Guidelines) do not appear to have been followed in proposed project siting;
- The proposed project is sited in a Montana Fish, Wildlife and Parks (FWP)-designated greater sage-grouse core habitat area, which is also considered a sage-grouse Priority Area for Conservation (PAC) by the Service. Greater sage-grouse are a candidate species for listing as threatened or endangered and would be considered a Species of Habitat Fragmentation Concern under the 2012 Guidelines. The Service recommends that no wind development or associated facilities be sited in core sage-grouse habitat.
- The proposed project has not yet fully characterized the potential risk to golden eagles.

We offer the following initial comments under the authority of and in accordance with the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 et seq.), as amended, Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668-668d, 54 Stat. 250), as amended, Executive Order 13186 *Responsibilities of Federal Agencies to Protect Migratory Birds*, and the Endangered Species Act (ESA) (16 U.S.C. 1531 et seq.), as amended.

The 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. 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 to facilitate the balanced development of the Nation's natural resources.

U.S. Fish and Wildlife Service 2012 Land-Based Wind Energy Guidelines

On March 23, 2012 the Service released guidelines designed to help wind energy project developers avoid and minimize impacts of land-based wind projects on wildlife and their habitats. These voluntary Guidelines provide a structured, scientific process for addressing wildlife conservation concerns at all stages of land-based wind energy development. They also promote effective communication among wind energy developers and federal, state, tribal, and local conservation agencies. In addition, the Guidelines provide Best Management Practices for site development, construction, retrofitting, repowering, and decommissioning. They took immediate effect and replaced interim guidance published by the Service in 2003. The Guidelines are available here: http://www.fws.gov/windenergy/docs/WEG_final.pdf

The Guidelines use a “tiered approach” for assessing potential adverse effects to species of concern and their habitats. The tiered approach is an iterative decision-making process for collecting information in increasing detail; quantifying the possible risks of proposed wind energy projects to species of concern and habitats; and evaluating those risks to make siting, construction, and operation decisions. During the pre-construction tiers (Tiers 1, 2, and 3), developers will work with the Service to identify and avoid and minimize risks to species of concern. During post-construction tiers (Tiers 4 and 5), developers will assess whether actions taken in earlier tiers to avoid and minimize impacts are successfully achieving the goals and, when necessary, taking additional steps to reduce impacts.

Subsequent tiers refine and build upon issues raised and efforts undertaken in previous tiers. Each tier offers a set of questions to help the developer evaluate the potential risk associated with developing a project at the given location. Briefly, the tiers address:

- Tier 1 – Preliminary site evaluation (landscape-scale screening of possible project sites)
- Tier 2 – Site characterization (broad characterization of one or more potential project sites)
- Tier 3 – Field studies to document site wildlife and habitat and predict project impacts
- Tier 4 – Post-construction studies to estimate impacts
- Tier 5 – Other post-construction studies and research

The tiered approach provides the opportunity for evaluation and decision-making at each stage, enabling a developer to abandon or proceed with project development, or to collect additional information if required. This approach does not require that every tier, or every element within each tier, be implemented for every project. If sufficient data are available at a particular tier, the following outcomes are possible:

- The project proceeds to the next tier in the development process without additional data collection.
- The project proceeds to the next tier in the development process with additional data collection.
- An action or combination of actions, such as project modification, mitigation, or specific post-construction monitoring, is indicated.
- The project site is abandoned because the risk is considered unacceptable.

Adherence to the Guidelines is voluntary and does not relieve any individual, company, or agency of the responsibility to comply with laws and regulations. However, if a violation occurs, the Service can consider a developer's documented efforts to communicate with the Service and adhere to the Guidelines.

The Guidelines are primarily designed for "utility-scale" projects (> 20 MW) to reduce potential impacts to species of concern (as defined in the Guidelines). We consider this stage of project development to currently be in Tier 3. We are unaware of any Service involvement regarding the current proposed project location or baseline surveys in advance of the July 21, 2014 meeting. We understand that you conducted a golden eagle nest survey within 10 miles of the project perimeter on April 14/15 and May 12/13 of 2014, and also a sage-grouse lek survey in the area. Following a proposed project's successful completion of the more general site evaluations and characterizations in Tiers 1 and 2, we generally recommend two years of baseline studies that include habitat mapping and assessment, raptor nest surveys, breeding/migratory bird use studies, and bat use studies. Eagle survey recommendations are discussed below.

Migratory Birds

The MBTA prohibits the taking, killing, possession, and transportation, (among other actions) of migratory birds, their eggs, parts, and nests, except when specifically permitted. The Service's Office of Law Enforcement (OLE) carries out its mission to protect migratory birds not only by investigations and enforcement, but also 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 OLE 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.

The Service recommends developers prepare written records of their actions to avoid, minimize and compensate for potential adverse impacts. In the past, the Service has referred to these as Avian and Bat Protection Plans (ABPP). However, ABPPs have more recently been primarily used for transmission projects. The Service therefore introduced a distinct concept for wind energy projects called Bird and Bat Conservation Strategies (BBCS). Typically, a project-specific BBCS will explain the analyses, studies, and reasoning that support progressing from one tier to the next in the tiered approach. A project-specific wind energy BBCS is an example

of a document or compilation of documents that describes the steps a developer could or has taken to apply the 2012 Land-Based Wind Energy Guidelines to mitigate for adverse impacts and address the post-construction monitoring efforts the developer intends to undertake. A developer may prepare a BBCS in stages, over time, as analysis and studies are undertaken for each tier. It will also address the post-construction monitoring efforts for mortality and habitat effects. Companies are encouraged to work closely with Service biologists to identify available protective measures when developing project plans and/or BBCSs, and to implement those measures prior to and during project construction and operation.

To minimize the electrocution hazard to birds, we recommend that any proposed power lines be buried. If this is not possible, we urge that any newly constructed power lines or power lines that may need to be modified or reconstructed as a result of the project, be designed and built to the APLIC standards in the *2006 Suggested Practices for Avian Protection on Power Lines* document. To increase power line visibility and reduce bird fatalities resulting from collisions with power lines, the Service recommends all new power lines that are proposed to be located in known raptor or water bird concentration areas or daily movement routes, or in major diurnal migratory bird movement routes or stopover sites, should include daytime visual markers on the wires to prevent collisions by these diurnally moving species per techniques outlined in *Reducing Avian Collisions with Power Lines: The State of the Art in 2012*. 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. APLIC is also currently drafting guidelines for power line and facility siting with respect to greater sage-grouse habitat; we recommend that you consider this guidance when available.

To the maximum extent practicable, project construction should be scheduled so as not to disrupt nesting birds or other wildlife during the breeding season. If work is proposed to take place during the breeding season or at any other time which may result in take of migratory birds, their eggs, or active nests, the Service recommends that the project proponent take all practicable measures to avoid and minimize take, such as maintaining adequate buffers, to protect the birds until the young have fledged. The Service further recommends that if field surveys for nesting birds are conducted with the intent of avoiding take during construction, any documentation of the presence of migratory birds, eggs, and active nests, along with information regarding the qualifications of the biologist(s) performing the surveys, and any avoidance measures implemented at the project site be maintained.

Certain activities may require a permit from the Service's Migratory Bird Management Division. Please contact the Region 6 Migratory Bird Permits Office if you are uncertain if activities may result in take of migratory birds. Additional information about permits can be found at <http://www.fws.gov/migratorybirds/mbpermits.html>. Service guidance regarding bird nest destruction can be found at <http://www.fws.gov/policy/m0208.pdf>.

Bald and Golden Eagles

The BGEPA prohibits anyone, without a permit issued by the Secretary of the Interior, from taking bald or golden eagles, including their parts, nests, or eggs. The BGEPA provides criminal and civil penalties for persons who take, possess, sell, purchase, barter, offer to sell, purchase or

barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof. The BGEPA defines take as pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb. "Disturb" means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior. In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagles return, such alterations agitate or bother an eagle to a degree that injures an eagle or substantially interferes with normal breeding, feeding, or sheltering habits and causes, or is likely to cause, a loss of productivity or nest abandonment.

In 2009, the Service published a final rule (50 C.F.R. §§ 22.26 and 22.27) (http://www.fws.gov/alaska/eaglepermit/pdf/Final_Disturbance_Rule.pdf) authorizing limited issuance of permits to take bald and golden eagles "for the protection of . . . other interests in any particular locality" where the take is compatible with the preservation of the bald eagle and the golden eagle, is associated with and not the purpose of an otherwise lawful activity, and cannot practicably be avoided. The decision about whether to pursue a take permit to achieve compliance with BGEPA is a risk-based decision resting solely at the discretion of the developer/operator. Although the Service cannot require application for or acquisition of a take permit, we believe it is in the best legal interest of wind facility operators to meet the requirements for and to obtain a programmatic eagle take permit where take may occur.

The Service has issued Eagle Conservation Plan (ECP) Guidance (<http://www.fws.gov/windenergy/PDF/Eagle%20Conservation%20Plan%20Guidance-Module%201.pdf>) that clarifies the requirements of the 2009 eagle permit rule as it applies to wind energy facilities. The ECP Guidance provides background information necessary for wind energy project proponents to prepare an ECP that assesses the risk of their project(s) to take eagles and how siting, design, and operational modifications can mitigate that risk. It also describes preferred methods for collecting and analyzing information to support an application for a programmatic permit, or to demonstrate that such a permit may not be necessary.

The ECP Guidance calls for scientifically rigorous surveys, monitoring, risk assessment, and research designs proportionate to the risk to eagles by, 1) conducting early pre-construction assessments to identify important eagle use areas; 2) avoiding, minimizing, and/or compensating for potential adverse effects to eagles; and, 3) monitoring for impacts to eagles during construction and operation.

The ECP Guidance provides a "road map" for the type of analysis and science that should be considered in a robust permit application to provide flexibility to the wind energy industry while safeguarding wildlife. The process described in the ECP Guidance is not required, but project proponents should coordinate closely with the Service concerning alternatives.

Per information that you presented in the July 21, 2014 meeting, golden eagle nests were not observed during the 2014 aerial survey; however, two lone golden eagles and a pair in flight

were observed in the project area, and historic records for golden eagle nesting occur in the project area. Project planning should therefore take eagle use and potential impact avoidance into account. Additional eagle use information may be available from FWP and the Montana Natural Heritage Program (MNHP). The ECP Guidance Technical Appendices recommend at least two years of the following surveys in support of a permit application (or in support of a decision that a take permit is not likely warranted): repeated 800-m radius point count surveys in the project footprint; nesting surveys in the project area; migration counts on likely migration routes in the project footprint; and utilization distribution assessment (accounting of the intensity of use of various home range portions) within the project footprint. We recommend such surveys, consistent with the ECP Guidance, to determine important eagle use areas and assist with project planning decisions. Aside from the 2014 aerial nest survey, it is our understanding that no other eagle surveys have been conducted at the site to date.

Threatened and Endangered Species

The Service has determined that the following listed threatened, endangered, and candidate species may be present in Carbon County, Montana:

| Scientific Name | Common Name | Status ¹ |
|----------------------------------|---------------------|---------------------|
| <i>Lynx canadensis</i> | Canada Lynx | LT, CH |
| <i>Mustela nigripes</i> | Black-footed Ferret | LE |
| <i>Ursus arctos horribilis</i> | Grizzly Bear | LT |
| <i>Centrocercus urophasianus</i> | Greater Sage-Grouse | C |
| <i>Anthus spragueii</i> | Sprague's Pipit | C |
| <i>Gulo gulo luscus</i> | Wolverine | P |
| <i>Pinus albicaulis</i> | Whitebark Pine | C |

¹ LE=Listed Endangered, LT=Listed Threatened, C=Candidate for listing, P=Proposed for listing, CH = Critical Habitat

The proposed project is sited in core greater sage-grouse habitat as mapped by FWP and Montana's Greater Sage-Grouse Habitat Conservation Advisory Council in the January 2014 Greater Sage-Grouse Habitat Conservation Strategy. Core areas are analogous to Priority Areas for Conservation as mapped in the Service's 2013 Greater Sage-Grouse Conservation Objectives Team Final Report. As stated above, sage-grouse are a candidate species for listing as threatened or endangered and would be considered a Species of Habitat Fragmentation Concern under the 2012 Guidelines. We also understand that 16 sage-grouse leks (some of which may be inactive) were mapped by FWP and the MNHP within four miles of the proposed project; you indicated that two of these, located on and within two to three miles of the project, were active during your lek survey.

The Service recommends that no wind development or associated facilities be sited in core sage-grouse habitat. We further recommend that wind development and associated facilities siting be avoided to the maximum extent possible in general (non-core) sage-grouse habitat, with no development occurring within four miles of active leks where avoidance is not possible. The Service minimally defines an active lek as a traditional display area in or adjacent to sagebrush-dominated habitats that has been attended by >2 male sage grouse in >2 of the previous 5 years.

You indicated that your proposed project facilities may be able to provide a maximum 0.5-mile buffer from leks; we are concerned that this buffer would not provide adequate lek protection.

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 or critical habitat. If the federal agency or its designated agent determines the action “may affect, is likely to adversely affect” listed species or critical habitat, the responsible federal agency shall request formal section 7 consultation with this office. If the evaluation shows a “may affect, not likely to adversely affect” determination, concurrence from this office is required. If the evaluation shows a “no effect” determination for listed species or critical habitat, further consultation is not necessary. If a private entity receives federal funding for a construction project, or if any federal permit or license is required, the federal agency may designate the fund recipient or permittee as its agent for purposes of informal section 7 consultation. The funding, permitting, or licensing federal agency is responsible to ensure that its actions comply with the ESA, including obtaining concurrence from the Service for any action that may affect a threatened or endangered species or designated critical habitat.

We recommend that biological assessments and other such evaluations include the following:

1. A description of the project.
2. A description of the specific area that may be affected by the action.
3. The current status, habitat use, and behavior of listed/proposed T/E species and status of listed/proposed critical habitat in the project area.
4. Discussion of the methods used to determine the information in Item 3.
5. An effects analysis of the action for listed/proposed species and critical habitat, including an analysis of any interrelated or interdependent action and direct, indirect, and cumulative effects.
6. Coordination/mitigation measures that will reduce/eliminate adverse impacts to listed/proposed T/E species and critical habitat.
7. The expected status of listed/proposed T/E species and critical habitat in the future (short and long term) during and after project completion.
8. A determination of "May affect, likely to adversely affect", "May affect, not likely to adversely affect", or "No effect" for listed species and critical habitat.
9. A determination of "is likely to jeopardize" or "is not likely to jeopardize" for proposed (or candidate) species and critical habitat.
10. Citation of literature and personal contacts used in developing the assessment.

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) outlining the proposed actions, determining the effects of those actions on federally-listed plant and wildlife species and their habitats (and may include proposed or candidate species), and defining measures to minimize and mitigate adverse effects.

Candidate species are those placed on the candidate list for future action, meaning those species do not receive statutory protection under the ESA. Candidates are reviewed annually by the

Service to determine if they continue to warrant listing or to reassess their listing priority. Ideally, sufficient threats can be removed to eliminate the need for listing. If threats are not addressed or the status of the species declines, a candidate species can move up in priority for a listing proposal. Federal agencies and non-federal applicants can voluntarily conference with the Service pursuant to section 7(a)(4) of ESA to ensure that their actions do not negatively impact candidate species. Some federal agencies provide the same level of protection to candidate species as proposed or listed species and take appropriate measures to avoid impacts. While not required, we encourage this approach. The Service is currently required to submit to the Federal Register for publication either a Proposed Rule (i.e., proposed listing) or a “not warranted” finding no later than September 30, 2015 for the greater sage-grouse.

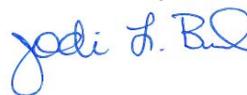
There may be additional state species of concern in the vicinity of the project and we strongly recommend coordination with FWP and MNHP. Both of these agencies may be able to provide updated, site-specific information regarding threatened, endangered, and sensitive species (including greater sage-grouse leks); eagle and other raptor nest locations; and other fish and wildlife resources occurring in the proposed project area. We also encourage you to share survey results with the Service, FWP and MNHP in order to build the knowledge base and facilitate management of these species in Montana.

If wetlands or other waters of the U.S. are to be impacted by this project, Corps of Engineers Section 404 permits may be required. The Service suggests any proposed project be designed to avoid and minimize impacts to wetland areas, stream channels and surrounding vegetation to the greatest extent possible. Direct, indirect, and cumulative impacts should be analyzed, along with future activities required to maintain these improvements.

As part of the National Wildlife Refuge System (NWRS), the Service administers fee title Refuge Waterfowl Production Areas and wetlands and grassland easements throughout Montana. We advise Mud Springs Wind Project, LLC review county plat maps to determine if the proposed project, rights of way (ROW), and appurtenant infrastructure would cross Service property interests. If so, we recommend that all property interests within the NWRS be avoided during project construction. If this is not possible, special use permits (SUP) or ROW grants may be necessary for construction activity that would cross NWRS property interests. Service issuance of SUPs or ROW grants is subject to the final determination of a Refuge compatibility review process, and would trigger NEPA compliance, as well as ESA section 7 consultation(s), if applicable. The refuge compatibility review process may add time to the overall project review process.

Thank you for taking the time to meet with my staff. If you require further information, please contact Brent Esmoil in this office at (406) 449-5225, extension 215, or at the letterhead address.

Sincerely,



Jodi L. Bush
Field Supervisor