Janice K. Brewer
Governor

Vanessa P. Hickman
State Land
Commissioner

ARIZONA STATE LAND DEPARTMENT

Attachment "D"

March 28, 2013

Michael Turisk, Planning Manager
Cochise County Community Development
1415 Melody Lane, Building E
Bisbee, Arizona 85603

Re: Special Use Application #SU-13-04, Red Horse Wind 2, LLC

Dear Mr. Turisk:

Red Horse Wind 2, LLC has applied for a Right of Way under application 14-116877 from the Arizona State Land Department (the Department) in order to develop a wind power project on the following State Trust land:

- Township 13 South, Range 22 East , Sections 15, 16, 17, 20, 21,22, 27, 28, 29, 32, 33 & 34
- Township 14 South, Range 21 East, Sections 12, 14, 21, 22 & 28
- Township 14 South, Range 22 East, Section 5, 6 & 7

The Department is processing the request and if approved will enable Red Horse Wind 2, LLC to construct 28 wind turbines on the subject state trust lands in the vicinity of Willcox, Arizona. Any approval by the Department will require applicant to be in compliance with local ordinances and regulations.

The Department has no objection to Red Horse Wind 2, LLC applying for the necessary conditional use permits for their proposed use. It is understood that the filing materials are subject to approval by the Department prior to the filing. All reports and filing costs are borne by Red Horse Wind 2, LLC at their expense with no provision for reimbursement from the Department.

Furthermore, the Department retains the right to rescind its approval at any time during the entitlement process in the event it finds that the proposed use is not in the best interest of the Trust.

COCHISE COUNTY
MAR 2 8 2013
PLANNING

In the event you have any questions regarding this approval, you may contact me at 602-542-6331 or at medelman@azland.gov.

Sincerely,

Mark Edelman, AICP
Manager
Planning and Engineering Section

C: Jim Adams
Max Masel
Ruben Ojeda
Red Horse Wind 2, LLC
File 14-116877

United States Department of the Interior

U.S. Fish and Wildlife Service
Arizona Ecological Services Office
2321 West Royal Palm Road, Suite 103
Phoenix, Arizona 85021-4951
Telephone: (602) 242-0210 Fax: (602) 242-2513

In reply refer to:
AESO/SE
02EAAZ00-2013-TA-0133
02EAAZ00-2013-CPA-0016

March 21, 2013

Mr. Michael Turisk, Planning Manager
Cochise County Community Development
1415 Melody Lane, Building F
Bisbee, Arizona 85603

Dear Mr.Turisk:

Thank you for your correspondence of February 27, 2013, regarding a special use permit application by Red Horse Wind 2, LLC on behalf of Torch Renewable Energy, LLC for development of a 51-megawatt (MW) wind energy generation facility consisting of up to 28 wind turbines, underground collection lines, a collection substation, overhead transmission lines to the existing Winchester Substation, and an operation and maintenance facility on Arizona State Trust Lands and private lands near the area of Allen Flats in Cochise County, Arizona.

The Fish and Wildlife Service (FWS) participated in a meeting with the applicant, the applicant's biological contractor, and the Arizona Game and Fish Department (AGFD) on January 24, 2013, to discuss pre-construction avian and bat use/risk studies and other potential wildlife issues. We note from the Torch Renewable Energy, LLC letter of February 21, 2013, included in the information packet provided by your office, that studies are being conducted in accordance with the FWS 2012 Land Based-Wind Energy Guidelines and the FWS 2012 Draft Eagle Conservation Plan Guidance.

Based on information provided during our January 24 meeting, other data sources, and our knowledge, we note that golden eagles (*Aquila chrysaetos*) nest in the general area of the project and that there is a roost utilized by lesser long-nosed bats (*Leptonycteris curasoae yerbabuenae*), a federally listed endangered species, in the general area of the project. Paniculate agave in the general area of the project and the transmission line provide foraging habitat of the type used by this nectar feeding bat. Golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c) and the Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 U.S.C. sec. 703-712). Lesser long nosed bat are protected under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Again, based on the January 24 meeting, we understand that the applicant's biological contractor is performing additional studies this spring to better assess risk to birds and bats, including golden eagle and lesser long-nosed bat and to inform development of bird and bat conservation strategies, consistent with the Wind Energy Guidelines, and eagle conservation strategies, consistent with the Draft Eagle Conservation Plan Guidance. The FWS is available to work with project proponents to assist in avoiding, minimizing, and mitigating adverse impacts to fish and wildlife resources and we look forward to reviewing additional information gathered this spring and the proposed conservation strategies.

In all future correspondence on this project, please refer to file number 02EAAZ00-2013-TA-0133. We also encourage you to coordinate the review of this project with the Arizona Game and Fish Department. Should you require further assistance or if you have any questions, please contact Bill Werner at (602) 242-0210 (x217) or Debra Bills (x234). Thank you for the opportunity to review the subject special use permit application.

Sincerely,

for Steven L. Spangle
Field Supervisor

cc: Torch Renewable Energy, LLC, Houston, TX
(Attn: Glen Holliday)
Chief, Habitat Branch, Arizona Game and Fish, Phoenix, AZ
Regional Supervisor, Arizona Game and Fish Department, Tucson, AZ
Wildlife Biologists, Fish and Wildlife Service, Tucson, AZ (Attn: S. Richardson, M. Crites)

W\William Werner\L Cochise Co Red Horse Wind 02EAAZ00_2013_TA_0133 032013.docx:cgg

THE STATE OF ARIZONA
GAME AND FISH DEPARTMENT
5000 W. CAREFREE HIGHWAY
PHOENIX, AZ 85086-5000
(602) 942-3000 • WWW.AZGFD.GOV

COCHISE COUNTY
MAR 27 2013
PLANNING

March 25, 2013

Mr. Michael Turisk
Cochise County Community Development
Planning and Zoning Building
1415 Melody Lane, Bldg E
Bisbee, AZ 85603

Re: Red Horse Wind 2, LLC.

Dear Mr. Turisk:

The Arizona Game and Fish Department (Department) has reviewed the Special Use permit that is being requested by Red Horse Wind 2, LLC, Torch Renewable Energy, Inc. The applicant proposes to develop a 51 MW wind facility consisting of 28 turbines with accessory uses, including underground and overhead transmission lines, substation and operation facility. The property consists of both state and private land parcels identified as Assessor's Parcel Number 209-69-001.

Generally, the Department supports the development of wind energy as a viable source of clean and renewable energy. We believe with proper site placement and safeguards, the benefits of utilizing wind energy outweigh the potential for negative effects to wildlife populations. However, we are concerned that specific sites may have an increased potential for negative impacts to certain breeding, migratory, and wintering species. Some taxa, such as raptors and bats, are particularly vulnerable to the installation of wind generation facilities and can be impacted directly through mortality from wind turbines and an overall deterioration of breeding and foraging habitats. Wildlife studies are needed to determine proper placement and the potential for negative impacts to both resident and migratory birds and bats. Without these studies, it is impossible for the Department to assess the project's potential impacts on wildlife populations.

The Department met with the applicant and their consultant (SWCA Environmental Consultants) on January 24, 2013, to discuss the project and the necessary wildlife studies that need to be performed to assess impacts on wildlife from development of the Red Horse Wind project. SWCA informed the Department that they began bird studies (Large Bird Use Counts and Small Bird Use Counts) on December 1, 2012 at the Red Horse Wind project. During that time, they observed a pair of golden eagles, a pair of red-tailed hawks, northern harriers, Cooper's hawk, peregrine falcons, and kestrels at the site. No cranes had been observed at that time.

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Although this preliminary data provides some insight into the project area, additional data are necessary for the Department to provide a more thorough analysis of potential wildlife effects of the project. Making a determination on the risk of possible impacts to wildlife on this limited data is difficult at best. It is only after the Department receives avian and bat data from the applicant that we will feel more confident in our conclusions about potential impacts to wildlife and their habitats. In the rest of this letter we address the Department's guidelines for assessing impacts on wildlife, data that currently exists for the project and surrounding areas, our concerns based on these data, and finally our recommendations for this application, wildlife data collection, and potential mitigation strategies.

Site Evaluation and Pre-Construction Biological Monitoring

The Arizona Game and Fish Department's *Guidelines for Reducing Impacts to Wildlife from Wind Energy Development in Arizona* (Guidelines) recommend that developers conduct an initial screening of the proposed project area in order to determine a) the wildlife species and habitats likely to be present at the site, b) the range of potential impacts to wildlife and habitat; and c) an approach for collecting adequate pre-construction biological data. Based on the findings of the initial site screening, the applicant is advised to classify the project with Department assistance into one of four categories of increasing potential risk to wildlife, which in turn merit progressively greater degrees of preconstruction biological data collection. Assigning a project to a category is not always clear-cut and the categorization may change as more data becomes available.

The applicant has completed the initial screening for the Red Horse Wind project but has not submitted their *Preliminary Site Screening* report (categorization), nor their *Preconstruction Study Plan* (wildlife studies), for the proposed Red Horse Wind project. Based on the wildlife concerns the Department submitted for the meteorological towers application (attached Department letter to Cochise County dated October 17, 2012), we believe this site to be a Category 3, possibly 4. A Category 3 site has high levels of bat and/or bird use or risk, presence of special status species, or considerable uncertainty regarding potential wildlife impacts. Characteristics which may put a proposed project site in Category 3 include: high prey abundance such as rodents or prairie dog colonies (current or historic) within, or immediately adjacent to, project areas that could attract resident and migratory raptors; known avian migration stopovers such as water bodies within or immediately adjacent to the project; high insect abundance that may increase potential as a bat foraging area; special status species occurring on or adjacent to a proposed site; or high concentrations of migrating, wintering, and/or breeding raptors. Projects for which little information is available on wildlife use and potential risk are also included in Category 3. Generally, Category 3 projects will need a minimum of two years of study to help understand and formulate ways to reduce impacts. Two years of data collection are recommended because one year will not adequately characterize bat and bird use due to high variability in seasonal populations from year to year. Additionally, in areas of seasonal importance (e.g. known or expected bat and/or raptor migration areas) the standard timing and frequency of surveys (e.g. weekly) may be inadequate to characterize overall use during these critical periods.

Preliminary Wildlife Implications

Species Habitat Conservation Guide: The Department has developed a statewide model, the Species and Habitat Conservation Guide (SHCG), to guide wildlife and habitat conservation priorities and inform project evaluation and planning on a state-wide scale. The SHCG indicates this area to have high wildlife value to the Department in a statewide context. We know Sulphur Springs Valley to the east is a highly utilized area for breeding, migratory, and wintering bird species, as well as bat species. Its ecological makeup, spatial configuration, and geological formation make it an attractive site for breeding, migratory, and wintering raptors. It also supports a large population on Sandhill Crane. It is likely that this area would exhibit similar wildlife trends.

Bats: Nationwide research indicates that bats can be disproportionately affected by wind development when compared to birds. Studies demonstrate that bat fatalities peak in late summer and early fall, coinciding with the migration of many species. Southeast Arizona provides exceptional foraging and roosting habitat for several bat species, including lesser long-nosed bats which are of particular concern and listed under the Endangered Species Act. The Lesser Long-nosed bat is considered an important pollinator of various agave species, columnar cacti and other Mexican plant species. They can travel up to 30km each night from their roosts to feeding grounds. Lesser long-nosed bats are believed to be declining due to a limited number of caves in which colonies can raise their young, human disturbance at maternity colonies, and loss of foraging habitat.

The Department expects to discuss with the applicant and their biological consultants what steps we may take to better understand the nature of lesser long-nosed bat activity and overall bat presence and behavior at the Red Horse Wind project. After all the data are analyzed, the Department may recommend a radio telemetry or radar study to better assess bat movement in and around the project area. In addition, the Department may ask for more extensive roost/colony searches in order to determine why bats are moving through the Red Horse project area.

Eagles: Golden eagles are of particular concern to the Department and the U.S. Fish and Wildlife Service. Little is known about golden eagle populations statewide; however, there is some indication that their populations are declining across the western United States. Within 10 miles of the Red Horse Wind project, the Department had identified two nests with paired golden eagles, two nests with 1 golden eagle present, 1 historic breeding area, and 7 potential golden eagle nests. The Department has also identified a winter foraging area for bald eagles within 10 miles of the Red Horse Wind project in Sulphur Springs Valley. This data has been shared among all partners (including both the applicant and their biological consultant). It is our understanding that per the Bald and Golden Eagle Protection Act and subsequent Guidance drafted by U.S. Fish and Wildlife Service, the locations and activity of golden eagles and active nests both on Red Horse Wind and in the vicinity may ultimately influence turbine locations, depending on turbine setback recommendations put forth in the Eagle Conservation Plan, which will be developed between the applicant, the U.S. Fish and Wildlife Service, and the Department.

Other bird species: There is the potential for other raptor and bird species, including cranes to be present on the project area during all or part of the year based on habitat characteristics and proximity to known species occurrences and migratory pathways.

Terrestrial wildlife and wildlife corridors: The potential effects of wind farms on terrestrial wildlife, in particular large ungulates such as deer and pronghorn which are found on Red Horse, are poorly understood. Very little research has been conducted and the few available studies have varied in the rigor of their methodology and in their findings. The Department is currently engaged in collecting telemetry data on pronghorn movements at another wind farm site in northern Arizona which should prove informative, but this is not yet available. The Department does not expect significant habitat loss or long-term adverse impacts to ungulates from the Red Horse Wind project and we believe that displacement of deer and pronghorn will most likely be temporary, though the available data is limited.

Avian and Bat Protection Plan and Post-Construction Study Plan

Most wind projects develop an Avian and Bat Protection Plan (ABPP) and Post-Construction Study Plan. Their purpose is to delineate a program designed to reduce the operational risks that result from bird and bat interactions with a wind energy facility. It is through the ABPP that both state and federal agencies can have some assurances of the developer's willingness to modify operational procedures, such as "curtailing" (shutting off) designated turbines during periods critical to specific wildlife species, should bird and bat fatalities be higher than anticipated. Development of a comprehensive ABPP will be important given the limited amount of preconstruction data that will be available for the Red Horse Wind project due to the applicant's construction schedule.

Hunter Access

The Department is concerned about the loss of hunter access. Hunters currently have access to and through this area. The Department seeks to maintain this arrangement into the future, as hunting remains an important tool for wildlife and habitat management. We hope to discuss this issue with the applicant to determine how it can be maintained throughout the construction and operational phases of the project.

Other Potential Wildlife Impacts and Recommended Mitigation

Above-ground transmission line: Transmission lines can pose an electrocution risk to birds that use the support poles as perches. While avian electrocutions typically occur on lower voltage transmission lines, we recommend that the applicant consult the Avian Power Line Interaction Committee's guidance to ensure that the design of its transmission line supports and other transmission infrastructure minimize the potential for avian electrocution (http://www.aplic.org/).

Habitat disturbance and invasive weed control: According to the applicant's special use application the proposed project will entail creation of new roads and road repair/improvement. Installation of concrete pads for turbine towers, erecting of support towers for the proposed overhead transmission line, trenching for underground collection lines, and creation of buildings and other infrastructure will all involve ground disturbance to varying degrees and some construction activities may require blasting. Thus the project will entail some permanent loss of vegetation and thus wildlife habitat, temporary disturbance in the form of dust, noise, and vibration, and present the possibility for invasive weed proliferation particularly in disturbed areas.

While measurable, the Department believes that the overall loss of vegetation (and thus habitat) to project infrastructure will be moderate and not present major problems for wildlife. There is the potential for noxious weed invasion as a consequence of ground disturbance, dust transport, and the moving of fill and other materials into and across the project site which could bear and transport the seeds of undesirable invasive species. While the degree and consequences of noxious weed proliferation following disturbance can vary considerably with local conditions, invasive plants have the potential to significantly alter vegetation community structure, soil moisture, fire regime, and other factors with potential consequences for wildlife. The applicant indicates in their CUP application their intention to implement noxious weed control based on NRCS Guidelines (p.14) and the use of certified weed-free materials for all roads (p.17) during the construction phase of the project, and to conduct weed abatement associated with road maintenance during the subsequent operations phase (p.15). The Department fully supports these proactive measures, and recommends that weed monitoring and abatement activities during the operations phase be extended beyond road maintenance to other aspects of operations and to any areas of the project site where significant ground disturbance has occurred. We recommend the applicant develop a noxious weed management plan as part of this project.

Turbine lighting: In keeping with Federal Aviation Administration (FAA) safety regulations for all structures exceeding 200 feet in height, the applicant proposes to install lights on a subset of turbines at the Red Horse Wind project to be determined by the FAA. The U.S. Fish and Wildlife Service has produced interim guidelines for communications tower installation that include recommendations for the installation of FAA-approved lighting (http://www.fws.gov/habitatconservation/communicationtowers.html). To minimize potential adverse effects on birds, the U.S. Fish and Wildlife Service recommends that the minimum amount of lighting required by the FAA for a given facility be used. If red lights are required, U.S. Fish and Wildlife Service recommends these be of the minimum intensity and provide the longest duration between flashes permitted by the FAA. We recommend that the applicant follow the U.S. Fish and Wildlife Service guidelines for lighting their wind turbines to the fullest extent possible, in order to avoid attracting night-migrating birds to the vicinity of turbines and minimize the potential for collisions.

Summary of Department Recommendations

1. Site evaluation and pre-construction biological monitoring: Preliminary Screening and Pre-Construction Study Plan should be submitted to the Arizona Game and Fish Department for review and concurrence.

2. Bats: After all the data are analyzed, the Department may recommend a radio telemetry or radar study to better assess bat movement in and around the project area. In addition, the Department may ask for more extensive roost/colony searches in order to determine why bats are moving through the Red Horse project area.

3. Eagles: Work closely with the Arizona Game and Fish Department and U.S. Fish and Wildlife Service to develop an Eagle Conservation Plan (ECP) for the project to help mitigate any unanticipated negative effects of the proposed wind farm on eagles.

4. Avian and Bat Protection Plan (ABPP): Work closely with the Arizona Game and Fish Department and U.S. Fish and Wildlife Service to develop an ABPP for the project to help mitigate any unanticipated negative effects of the proposed wind farm on birds and bats.

5. Post-construction study plan: Work with the Department and the U.S. Fish and Wildlife Service to develop an appropriate post-construction monitoring plan to assess potential wildlife impacts of the wind farm consistent with and supportive of the objectives of the ABPP.

6. Hunter access: Discussions between the applicant and Arizona Game and Fish Department need to occur to develop a mutually agreeable approach to hunter access for Red Horse Wind project for both the construction and operational phases of the project.

7. Overhead transmission line: Consult the Avian Power Line Interaction Committee's guidance to ensure that transmission line supports and other transmission infrastructure minimize the potential for avian electrocution.

8. Invasive weed control: Develop a noxious weed management plan which covers both the construction and operational phases, and which encompasses all areas of the project site where significant ground disturbance has occurred or where weed invasion is possible.

9. Turbine lighting: As recommended by the U.S. Fish and Wildlife Service, use the minimum number and intensity of lights and the longest duration between flashes permitted by the Federal Aviation Administration for this project. If permitted by the FAA use white lights instead of red to minimize the attraction of night-migrating birds.

After review of the Special Use application and available data on the project, the Department recommends postponing approval of the application until more wildlife data is available to assess the applicant's affects on wildlife populations. If this is not possible, we recommend putting our above numbered recommendations as conditions to the permit. We appreciate the opportunity to

review this application for the Red Horse Wind Proposal. We look forward to further discussions with the applicant in the coming months. If you have any questions or desire any further information, please do not hesitate to contact me at (623) 236-7606 or consult the Arizona Game and Fish Department's Wind Development Guidelines at: http://www.azgfd.gov/hgis/documents/RevisedAZWindGuidelinesNov2009_2.pdf.

Sincerely,

Barbara Cook for Ginger Ritter

Ginger Ritter
Project Evaluation Program Specialist, Habitat Branch

Attachments

cc: John Windes, Habitat Program Manager, Region V
Bill Werner, Renewable Energy Coordinator, USFWS

AGFD #M13-03063348

DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FT HUACHUCA
2837 BOYD AVENUE
FORT HUACHUCA, ARIZONA 85613-7001

March 29, 2013

Office of the Garrison Commander

Mr. Michael Turisk
Planning Manager
Cochise County Community Development
1415 Melody Lane, Building E
Bisbee, Arizona 85603

Dear Mr. Turisk

This letter is in response to your e-mail dated February 27, 2013, subject: Proposed 28 Turbine Wind Energy Project in Northern Cochise Co. Thank you for the opportunity to comment on the proposed Torch Renewable Energy Red Horse 2 Wind Farm Special Use Permit (SUP) Application.

The application proposes to install 28 Wind Turbines with a total generating capacity of 51 MW on approximately 330 acres. The Wind Turbines will be up to 487 feet in total height with an additional blade diameter of 191.5 feet. Referencing the information and maps provided in the SUP Application, we have located the proposed site for this development within the Buffalo Soldier Electronic Test Range (see enclosure).

Based on the assessment of the location of this proposal within the Buffalo Soldier Electronic Test Range (BSETR), we have broken down potential areas of concern to our National Defense Missions as follows:

a. Electromagnetic Interference (EMI) from the wind turbines themselves.

b. EMI from the Collection Substation.

c. EMI from the 2X34.5 KV Transmission Lines feeding into the Winchester Substation.

d. Line-of-sight Signal Distortions from the Turbine Blades.

From review of the documentation provided in the SUP Application, we have assessed the potential impacts in each of these areas of concern. Our comments follow:

a. EMI from the Wind Turbines – Based on studies and analysis performed by the Electronic Proving Ground of the current wind turbine on Ft. Huachuca and similar wind turbines as those proposed in this application observed at several locations in California, we do not believe there will be significant enough EMI generation from this proposal to significantly impact our testing missions in that area of the BSETR complex. As a follow on, we would like to have the opportunity to review and comment on the installation design for these turbines to ensure that proper grounding and other EMI minimizing considerations are incorporated.

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b. EMI from Collection Substation – There is not sufficient enough information in the SUP Application on the design and components in the collection substation to make a definitive assessment of potential EMI impacts. We feel that with proper design considerations this can be minimized but request further information from Torch Renewable Energy on their plans before making any final determination.

c. EMI from the Transmission Lines – New 2x34.5 KV lines will be constructed from the proposed Wind Farm location down to the Tucson Electric Power (TEP) 345KV Transmission Line corridor and then into the Winchester Substation. Transmission lines can produce EMI as observed by a July 2012 study performed by the Electronic Proving Ground on 500KV lines like those being considered for the Sun Zia project. Based on that study, the only new impact from these lines will be the new corridor running from the Red Horse 2 Wind Farm down to the TEP corridor. There will be no additional EMI impacts in the BSETR once the two lines merge there. Based on the location along the eastern boundary of the BSETR, EPG does not anticipate significant impact to testing operations due to the addition of this new corridor.

d. Line-of-Sight Signal Distortions – Signal distortions have been noted by EPG based on observations made and data collected on wind farms in California. Impacts are in narrow frequency bands and associated with the length of the blades on the turbines. On line-of-sight signals in that frequency range shot through the proposed Red Horse 2 Wind Farm, this could impact testing missions. However, based on the location of the proposed project along the eastern boundary of the BSETR, we feel that we can adjust testing missions in that part of the range complex to work around this potential impact. However, future expansions of wind farms in the BSETR may make this work around more difficult and could have impact on our ability to test in that part of the range.

Again, we appreciate the opportunity to work with your planning staff and Torch Renewable Energy on this project. We await the receipt of the information requested before providing final comments on this project.

The point of contact for this action is Mr. Jim North in the Plans, Analysis and Integration Office, e-mail james.s.north.civ@mail.mil or telephone (520) 538-3135.

Sincerely,

THOMAS E. BORER
Deputy Garrison Commander

Enclosure