United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
Palm Springs Fish and Wildlife Office
777 East Tahquitz Canyon Way, Suite 208
Palm Springs, California 92262

In Reply Refer To:
FWS-ERIV-18B0332-18CPA0353

September 18, 2018
Sent by email

Mr. Benjamin Torres
Associate Planner
City of Desert Hot Springs
65950 Pierson Boulevard
Desert Hot Springs, California 92240

Subject: Notice of Preparation of a Draft Supplemental Environmental Impact Report; Desert Hot Springs Wind Energy Repowering Project, Riverside County, California

Dear Mr. Torres:

The U.S. Fish and Wildlife Service (Service) has reviewed the Notice of Preparation (NOP) of a Draft Supplemental Environmental Impact Report, dated August 20, 2018, for the Desert Hot Springs Wind Energy Repowering Project (Project). The proposed Project, located in the San Gorgonio Wind Resource Area in eastern Riverside County, California includes the removal of 69 existing 65-kilowatt (kW) wind turbines with 4 larger 2.0 – 4.2 megawatt (MW) turbines.

In January 2001, the City of Desert Hot Springs finalized an Environmental Impact Report and approved a Conditional Use Permit to remove the existing lower wattage turbines and replace them with eight larger turbines generating between 2.0 and 4.2 MW of nameplate capacity per turbine. The 2001 project also included a gen-tie connection to an existing substation and a 309-foot tall new meteorological tower. The current draft Supplemental Environmental Impact Report is to evaluate the changes to the 2001 approved and permitted project. These changes include reducing the number of new turbines from eight to four. The new turbines would consist of tubular steel towers with an estimated rotor diameter of up to 384 feet and a total height of up to 493 feet.

The revised Project occurs within the Coachella Valley Multiple Species Conservation Plan (CVMSHCP) area, west of Highway 62 in the city of Desert Hot Springs. Per Section 7.3.1 of that plan, new ground disturbance associated with repowering of wind energy facilities is a Covered Activity and adverse effects to Covered Species from construction are addressed; however, adverse effects to Covered Species from operation of wind facilities are not covered (see Section 7.3.1 of the CVMSHCP).

We offer the following comments on the NOP as they relate to potential impacts on public trust resources. The primary concern and mandate of the Service is the conservation, protection, and enhancement of fish and wildlife resources and their habitats for the continuing benefit of the

American people. The Service has legal responsibility for the welfare of migratory birds, anadromous fish, and threatened or endangered animals and plants listed under the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq*.). The comments provided herein are based on the information provided in your NOP letter, our knowledge of sensitive and declining wildlife resources, and our participation in regional renewable energy conservation planning efforts.

We offer the following comments and recommendations to help avoid and minimize adverse impacts to public trust resources, specifically migratory birds and golden eagles (*Aquila chrysaetos*). Golden eagles, which are not a Covered Species under the CVMSHCP, occur near the Project site along the foothills of the San Jacinto mountain range. We are aware of two recent eagle fatalities that likely resulted from collision impacts at wind farms near Cabazon, California, approximately seven miles southwest of the Project.

Replacement of several smaller wind turbines with fewer, but significantly taller, wind turbines may result in an increase in air space hazardous to birds. As illustrated in the table below (based on information we gathered on the Internet at *https://en.wind-turbine-models.com*/ on August 30, 2018), at most repowered wind projects the total amount of hazardous air space, or rotor-swept area, increases at the project site, and for that reason we believe the impacts to avian species may be greater with larger, taller turbines.

Turbine type	Number of turbines	Blade length (meters)	Hub height (meters)	Rated Power*	RSA (square meters)	Project Total Hazardous Air Space/RSA (square meters)
Example: Kenetech KCS56	380	7.2	20	100 kW	247	93,860
Example: GE 2.75 MW	45	200	123	2.75 MW	7,854	353,430

*Measurements of rated power are in kilowatts (kW) or megawatts (MW).

We are concerned that installation of new turbines of higher maximum height and larger rotor-swept area will result in greater adverse impacts to birds, including raptors and golden eagles. Based on recent golden eagle mortalities in the area, we recommend the Project proponent develop an Eagle Conservation Plan (ECP) and work with the Service to determine if an eagle take permit under the Bald and Golden Eagle Act (16 U.S.C. 668-668d) is necessary. Service guidance on development of an ECP (Service 2013) is available on the Internet at *http://www.fws.gov/migratorybirds/pdf/management/eagleconservationplanguidance.pdf.*

To document the Project's measures to minimize impacts to other birds and raptor populations, we recommend the project applicant also prepare a Bird and Bat Conservation Strategy (BBCS) in accordance with the Service's Wind Energy Guidelines (Service 2012) (available on the Internet at *http://www.fws.gov/ecological-services/es- library/pdfs/WEG_final.pdf*). We recommend the BBCS include systematic post-construction mortality monitoring, including searcher efficiency and carcass persistence trials, and adaptive management measures as necessary to address avian impacts.

The Service's Wind Energy Guidelines help wind energy project developers avoid and minimize impacts of land-based wind projects on wildlife and their habitats. The goal of the voluntary guidelines is smart siting, design, and operation. The guidelines also assist developers in identifying species of concern that may be affected by operation of their project, including migratory birds, bats, and golden eagles. It is unclear from the information provided in the NOP letter if the Project developer has considered these guidelines to site, design, and operate the repowering of the Project to reduce potential avian fatalities. The Service is available to help the Project applicant make informed decisions in siting, constructing, and operating the facility to reduce collision impacts, and to ensure the BBCS includes a robust systematic mortality-monitoring component as the basis for adaptive management to ensure potential adverse effects to birds are evaluated and minimized.

We appreciate the opportunity to provide comments on the NOP of a draft Supplemental Environmental Impact Report. We have enclosed specific recommendations to further assist in avoidance and minimization of impacts to public trust resources. Should you have any questions regarding these comments, or if we can assist in developing a BBCS, please contact Felicia Sirchia at (760-322-2070, extension 405 or Thomas Dietsch at 760-431-9440, extension 214)

Sincerely,

JENNESS MCBRIDE

Digitally signed by JENNESS MCBRIDE
Date: 2018.09.18 16:15:32 -07'00'

For Kennon A. Corey
Assistant Field Supervisor

Enclosure

cc: Charles Land, CDFW

References Cited

[Service] U.S. Fish and Wildlife Service. 2012. U.S. Fish and Wildlife Service Land-Based Wind Energy Guidelines. Department of the Interior. Washington, DC. Available on the Internet as of September 17, 2018. *https://www.fws.gov/ecological-services/es-library/pdfs/WEG_final.pdf*

[Service] Fish and Wildlife Service. 2013. Eagle Conservation Plan Guidance, Module 1 – Land-based Wind Energy. Version 2. Division of Migratory Bird Management. Washington, DC. Available on the Internet as of September 17, 2018. *www.fws.gov/migratorybirds/pdf/management/eagleconservationplanguidance.pdf*

Enclosure

U.S. Fish and Wildlife Service
Avoidance and Minimization Recommendations on the Notice of Preparation
for the Desert Hot Springs Wind Repowering Project

Avian Recommendations

1. Prepare and implement a Bird and Bat Conservation Strategy (BBCS) in consultation with the County of Riverside, California Department of Fish and Wildlife (CDFW), and the Service for review and comment. The BBCS will include the following:

    - A description and assessment of the existing habitat, risk characterization, and avian risk minimization measures.
    - A statistically robust, systematic avian and bat mortality and injury monitoring program to: (1) estimate annual mortality by taxa and season using appropriate models and appropriate estimators (this estimate should include mortality associated with all features of the project that are likely to result in injury and mortality – e.g., turbines, gen-ties); (2) identify collision and other mortality during diurnal and nocturnal times of the day; and (3) assess the spatial distribution and abundance of mortalities [species composition (including rare and sensitive species), abundance, and distribution] on the project site.
    - An adaptive management and decision-making framework for reviewing, characterizing, and responding to monitoring results.
    - Specific conservation measures and/or programs to avoid, minimize, reduce, or eliminate avian and bat injury or mortality over time and evaluation of the applicability and effectiveness of those measures using results from the monitoring program.

    The avian and bat mortality and injury monitoring program should include:

    - At least 2 years of onsite monitoring to systematically survey representative locations within the facility, at a level that will produce statistically robust data. The monitoring effort will account and correct for potential spatial bias and allow for the extrapolation of survey results to non-surveyed areas within the site boundary and to tailor the survey interval seasonally based on carcass removal rates.
    - Statistically robust carcass removal and searcher efficiency trials pre and post construction to document the extent to which avian or bat carcasses remain over time (hours/days) and how well searchers can detect carcasses within the project area. The results from these trials will be used to adjust the survey frequency and to improve mortality estimates to reflect bias from carcass removal rates and searcher efficiency.

- Accepted statistical methods from the peer-reviewed literature to generate facility estimates of potential post-construction avian and bat impacts based on the observed number of injury/fatality detections during standardized monitoring.
- Handling and reporting requirements according to applicable State or Federal permits.
- Development of an injured bird response plan that delineates care and curation of any and all injured birds, and funding for rehabilitation centers for the care and treatment, and eventual release or permanent storage of injured birds.