APPENDIX C:

LETTER FROM SUSAN LINNER, U.S. FISH AND WILDLIFE SERVICE, LAKEWOOD, COLORADO, TO KARYN COPPINGER, TRC MARIAH ASSOCIATES INC., LARAMIE, WYOMING, DATED NOVEMBER 22, 2004

Rec. 11-24-04
KDC
File #

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
Colorado Field Office
755 Parfet Street, Suite 361
Lakewood, Colorado 80215

IN REPLY REFER TO:
ES/CO: Wind Energy/WAPA-Invenergy Wind
Mail Stop 65412

NOV 22 2004

Ms. Karyn Coppinger
TRC Solutions
605 Skyline Drive
Laramie, Wyoming 82070-8909

Dear Ms. Coppinger:

The U.S. Fish and Wildlife Service (Service) received your letter dated October 28, 2004, regarding the **proposed Peetz Table Wind Power Project in Logan County, Colorado**. These comments have been prepared under the provisions of the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. 1531 et. seq.), the Bald and Golden Eagle Protection Act of 1940 (BGEPA), as amended (16 U.S.C. 668 et. seq.), the Migratory Bird Treaty Act of 1918 (MBTA), as amended (16 U.S.C. 703 et. seq.), and the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321-4327).

On May 13, 2003, the Service issued *Interim Guidance on Avoiding and Minimizing Impacts to Wildlife from Wind Turbines* (Guidance), which can be found at the following link: http://www.fws.gov/r9dhcbfa/wind.pdf. Similar to the Service's voluntary guidance addressing the siting, construction, operation, and decommissioning of communication towers and the voluntary guidance developed in cooperation with the electric utility industry to minimize bird strikes and electrocutions (APLIC 1994, APLIC 1996), the Guidance is intended to assist the wind energy industry in avoiding or minimizing impacts to wildlife and their habitats. This is accomplished through: (1) proper evaluation of potential Wind Resource Areas (WRAs), (2) proper location and design of turbines and associated structures within WRAs selected for development, and (3) pre- and post-construction research and monitoring to identify and/or assess impacts to wildlife. The Guidance is based on current science and will be updated as new information becomes available; it is voluntary and interim in nature. The Guidance will be evaluated over a 2-year period and then modified as necessary based on field performance, comments from the public, and on the latest scientific and technical discoveries developed in coordination with industry, states, academic researchers, and other Federal agencies. After the 2-year period, the Service plans to develop a complete operations manual for evaluation, site selection, design, construction, operation, and monitoring of wind energy facilities in both terrestrial and aquatic environments.

Data on wildlife use and mortality collected at one wind energy facility are not necessarily applicable to others; each site poses its own set of possibilities for negative effects on wildlife. In addition, the wind industry is rapidly expanding into habitats and regions that have not been well studied. The Service therefore suggests a precautionary approach to site selection and development, and will employ this approach in making recommendations and assessing impacts of wind energy developments. We encourage the wind energy industry to follow the Guidance and, in cooperation with the Service, to conduct scientific research to provide additional information on the impacts of wind energy development on wildlife. We further encourage the industry to look for opportunities to promote bird and other wildlife conservation when planning wind energy facilities (e.g., voluntary habitat acquisition or conservation easements).

The Service is guided by the Fish and Wildlife Service Mitigation Policy (Federal Register 46 (15), January 1981) in evaluating modifications to or loss of habitat caused by development. This policy follows the sequence of steps recommended in the Council on Environmental Quality's Regulations for Implementing the Procedural Provisions of NEPA in seeking to avoid, minimize, or compensate for negative impacts. Mitigation can involve (1) avoiding the impact of an activity by taking no action; (2) minimizing impacts by limiting the degree of activity; (3) rectifying an impact by repairing, rehabilitating, or restoring an affected environment; (4) reducing or eliminating an impact by conducting activities that preserve and maintain the resources; or (5) compensating for an impact by replacing or providing substitute resources or environments.

Any mitigation recommended by the Service for wind energy development would be voluntary on the part of the developer unless made a condition of a Federal license or permit. Mitigation does not apply to "take" of species under the MBTA, BGEPA, or ESA. The goal of the Service under these laws is the elimination of loss of migratory birds and endangered and threatened species due to wind energy development. The Service will actively expand partnerships with regional, national, and international organizations, States, tribes, industry, and environmental groups to meet this goal.

Projects with Federal involvement may require additional analysis under NEPA, ESA, or the National Wildlife Refuge System Administration Act. This includes projects on federally owned lands (e.g., National Wildlife Refuges, National Forests), lands where a Federal permit is required for development (e.g., BLM-administered lands and jurisdictional wetlands), or lands where Federal funds were used for purchase or improvement (some State Wildlife Management Areas).

The Guidance contains a site evaluation process, called the Potential Impact Index (PII), with checklists for pre-development evaluations of potential terrestrial wind energy development sites. This site evaluation protocol was developed by a team of Federal, State, university, and wind energy industry biologists to rank potential terrestrial wind energy development sites by their potential impacts on wildlife. The PII represents a "first cut" analysis of the suitability of a site proposed for development. It does so by estimating use of the site by selected wildlife species as an indicator of potential impact. Emphasis of the PII is on initial site evaluation and is intended to provide more objectivity than simple reconnaissance surveys. There are two steps to follow:

1. Identify and evaluate reference sites, preferably within the general geographic area of the proposed facility. Reference sites are high-quality wildlife areas where wind development would result in the maximum negative impact on wildlife (i.e., sites selected to have the highest possible rank using the protocol). Reference sites are used to determine the comparative risks of developing other potential sites.

2. Evaluate potential development sites to determine risk to wildlife and rank sites against each other using the highest-ranking reference site as a standard. Although high-ranking sites are generally less desirable for wind energy development, a high rank does not necessarily preclude development of a site, nor does a low rank automatically eliminate the need to conduct predevelopment assessments of wildlife resources or post-development assessments of impacts.

Use of this process allows comparison of one site with another with respect to the impacts that would occur to wildlife if the area were developed. The evaluation area for a potential development site should include the "footprint" encompassing all of the turbines and associated structures including transmission lines planned for that proposed facility, and the adjacent wildlife habitats which may be affected by the proximity of the structures. Transmission lines extending outside the footprint may be excluded. All potential development sites within a geographic area should be evaluated before a site is selected for development.

Pre-development evaluations should be conducted by a team that includes Federal and/or State agency wildlife professionals with no vested interest (e.g., monetary or personal business gain) in the sites selected. Teams may also include academic and industry wildlife professionals as available. Any site evaluations conducted by teams that do not include Federal and/or State agency wildlife professionals will not be considered valid evaluations by the Service. The pre-development evaluation may also identify additional studies needed prior to and after development. Post-construction monitoring to identify any wildlife impacts is recommended at all developed sites. Pre- and post-development studies and monitoring may be conducted by any qualified wildlife biologist without regard to his/her affiliation or interest in the site.

Please also be aware of the potential application of the MBTA and the BGEPA to wind projects involving transmission lines. Protective measures to help reduce possible impacts to migratory birds and other raptors should be installed. 7 CFR § 1724.52 allows for deviations from construction standards for raptor protection, provided that structures are designed and constructed in accordance with *Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 1996* published by the Edison Electric Institute/Raptor Research Foundation. The regulation requires that such structures be in accordance with the National Electrical Safety Code and applicable State and local regulations.

For your convenience, we have enclosed a list of Colorado's threatened and endangered species, as well as the counties in which they are known to occur. We cannot provide site-specific details.

If questions regarding site-specific presence of an endangered species, the extent of its habitat, or the effects of a particular action need to be resolved, the Service recommends that a knowledgeable consultant be contacted to conduct habitat and population assessments or to provide recommendations regarding options under the ESA. Due to staffing constraints, the Colorado Field Office cannot provide you with these services.

If the Service can be of further assistance, please contact Sandy Vana-Miller of my staff at (303) 275-2370.

Sincerely,

For Susan C. Linner
Colorado Field Supervisor

Enclosure: Species List

cc: FWSR6, B. Dach
FWSR6/GJ, E. Mayo
FWSR6/LK, S. Vana-Miller