

January 19, 2009

## **Mitigation Action Plan**

### **Colorado Highlands Wind Project Logan County, Colorado**

**Project Overview.** Western Area Power Administration (Western) a power marketing agency of the U.S. Department of Energy (DOE) proposes to approve interconnection of the Project with Western's transmission system and the connected action of the Project. Colorado Highlands Wind LLC (CHWP) applied (via predecessor project owner Wind Energy Prototypes) to Western to interconnect a 90-megawatt (MW) wind power facility with Western's existing Sterling-Frenchman Creek 115-kV transmission line. Approval of the Interconnection Agreement would allow the Project to interconnect with Western's proposed Wildhorse Creek Switchyard. In accordance with the DOE NEPA Implementing Procedures, Western prepared an environmental assessment (EA) on Western's action and the Project. The EA evaluates the potential environmental impacts associated with Western's decision on the Interconnection Agreement and the Project. As referenced in the FONSI, this Mitigation Action Plan (MAP) required by 10 CFR § 1021.331 will be implemented by the Project.

A detailed description of the Project is in the EA.

**Mitigation Action Plan.** The DOE requirements for preparing a Mitigation Action Plan (MAP) are specified in 10 C.F.R. §1021.331(b) These regulations state that, where mitigation measures are required to render the impact of a proposed action not significant, DOE must prepare a MAP, which "shall address all commitments to such necessary mitigations and explain how mitigation will be planned and implemented." The MAP must be prepared before and referenced in the FONSI. This MAP addresses the construction, operation, and maintenance of the Colorado Highlands Wind Project.

Two distinct sets of mitigation measures were identified in the EA: (1) Western's Standard Construction, Operation, and Maintenance Practices, and (2) Colorado Highlands Wind Project-committed mitigation measures. Of the several mitigation measure commitments described in the EA, the following would ensure that potential impacts are insignificant. Other mitigation measures, such as the standard construction mitigation measures and applicant-committed mitigation measures will be implemented as described in the EA during project design, construction, and operation. These

measures will be implemented to avoid, reduce, or eliminate project impacts related to CHW's Project.

### **Federally Listed, Proposed, and Candidate Species and Species of Concern**

To mitigate potential impacts from the water depletions occurring during construction, operations and maintenance, CHW is participating in the South Platte River Water Related Activities Program (SPRWRAP) component of the Platte River Recovery Implementation Recovery Program, as approved by the USFWS for compliance with the ESA.

### **Mitigation of Impacts to Cultural Resources**

- Any cultural resources (prehistoric or historic site or object) discovered by CHW or any person working on its behalf would be reported immediately to Western. All operations in the immediate vicinity of the discovery would be suspended at once, and the area would be secured with temporary fencing and/or flagging. Western would document and evaluate the discovery and would determine appropriate actions to be taken in order to prevent the loss of significant cultural or scientific values. Western or CHW may consult with the Colorado State Historic Preservation Office (SHPO) to determine National Register of Historic Places eligibility or mitigation measures. CHW would be responsible for the cost of evaluation, and any decision as to proper mitigation measures would be made by Western after consulting with CHW. Operations in the vicinity of the discovery would not resume until written authorization to proceed has been received from SHPO.
- Western, at the expense of CHW, will complete consultation under Section 106 of the National Historic Preservation Act, on the one remaining identified site (Site 5LO677). The consultation process will be completed to the satisfaction of the State of Colorado Historic Preservation Officer, Western, the Advisory Council on Historic Preservation (if required) and CHW.

### **Mitigation of Impacts to Paleontological Resources**

Paleontological resource discovered by CHW or any person working on its behalf would be immediately reported to CHW. If paleontological resources are encountered, additional avoidance and mitigation measures are described in Section 3 of the EA. While unlikely, if oversight is deemed necessary, monitors would also receive training in the identification of paleontological resources specific to the site.

### **Wildlife**

The following measures would be implemented to minimize impacts to wildlife.

- CHW would incorporate Colorado Division of Wildlife (CDOW) and U.S. Fish and Wildlife Service (FWS) recommendations (which included to

reference to Interim Guidelines to Avoid and Minimize Wildlife Impacts from Wind Turbines [FWS 2003]) as agreed to in a meeting that occurred on June 25, 2008, and as set forth in a letter to the CDOW dated July 18, 2008, in addition to the letters received from both the CDOW and FWS as provided in Appendix A of the EA.

- Surface occupancy (i.e. structures) and surface-disturbing activities would be prohibited as follows for the following species:
  - great horned owls - no surface occupancy within 402 m (0.25 mi) of nest; no construction within 805 m (0.5 mi) of nest from January 1 to July 15;
  - red-tailed hawk - no surface occupancy within 402 m (0.25 mi) of nest; no construction within 805 m (0.5 mi) of nest from February 15 to July 15;
  - Swainson's hawk - no surface occupancy within 402 m (0.25 mi) of nest; no construction within 805 m (0.5 mi) of nest from April 1 to July 15;
  - burrowing owl – no construction within 46 m (150 feet) of an active nest area from March 1 through October 31; and
  - greater prairie chicken lek – no surface structures or overhead construction within 805 m (0.5 mi) of lek.
- Additional mitigation for raptors would be designed on a site-specific basis, as necessary, in consultation with the FWS and CDOW. CHW would notify the FWS or CDOW immediately if raptors are found nesting on Project facilities (i.e., power poles, towers).
- Power line construction would follow the recommendations of the Avian Power Line Interaction Committee (APLIC 2006) to avoid electrocution of raptors and other avifauna.
- CHW would minimize noise, prohibit hunting, fishing, dogs, or possession of firearms by its employees and its designated contractor(s) in the Project area during construction, operation, and maintenance.
- Surface disturbance would be avoided or minimized in areas of high wildlife value (e.g., prairie dog colonies, playas, shelterbelts, and stock ponds).
- Potential increases in poaching would be minimized through employee and contractor education regarding wildlife laws. If violations are discovered, the offending employee or contractor would be disciplined and may be dismissed by CHW and/or prosecuted by the CDOW.
- CHW would set and enforce speed limits on roads to minimize wildlife mortality due to vehicle collisions, travel would be restricted to designated roads; no off-road travel would be allowed except in emergencies.
- Where practical, CHW would use state-of-the-art wind turbines and wind industry standard practices.
- CHW would conduct raptor nest searches and avoid activities in buffer areas around active nests during construction. The raptor nest searches would be conducted monthly in February and March, and every two weeks from April through July during construction. These searches coincide

with other ongoing surveys (winter raptor surveys, spring avian surveys, etc.) during construction.

- CHW would minimize surface disturbance and conduct prompt reclamation, including restoration of shortgrass prairie.
- CHW would use best management practices to minimize erosion and harm from spills.
- CHW would conduct post-construction mortality monitoring (for both avian and bat species) in accordance with National Wind Coordinating Committee recommendations. If post-construction monitoring indicates the potential for unacceptable avian mortality, CHW will consult with CDOW and FWS to evaluate practicable mitigation alternatives in accordance with current best management practices.

If other species of concern are found nesting in the Project area, CHW will consult with CDOW and FWS regarding recommended buffer zones. As is currently the case for the identified species, the buffer distance and restriction dates may vary on a case-by-case basis, depending on such factors as the activity status of the nest, species involved, natural topographic barriers, line-of-sight distances, and other conflicting issues. Exceptions may be granted in writing by the FWS and/or CDOW.