

PMC-EF2a

(2.04.02)

**U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION**



RECIPIENT:NREL

STATE: CO

PROJECT TITLE : NWTC Avian Monitoring Program; NREL Tracking No. 10-014

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
		NREL-10-014	0

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:

Description:

- DOE/EA-1378** Final Site-Wide Environmental Assessment of the National Renewable Energy Laboratory's National Wind Technology Center
- B3.1** Onsite and offsite site characterization and environmental monitoring, including siting, construction (or modification), operation, and dismantlement or closing (abandonment) of characterization and monitoring devices and siting, construction, and associated operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis. Activities covered include, but are not limited to, site characterization and environmental monitoring under CERCLA and RCRA. Specific activities include, but are not limited to:

Rational for determination:

The proposed project would be for the implementation of an avian monitoring program at the National Renewable Energy Laboratory's (NERL) National Wind Technology Center (NWTC), located southeast of the intersection of Colorado Highway (CO) 93 and CO-128, in the County of Jefferson, State of Colorado. The NWTC consists of 305 acres and is primarily used for wind energy research, development, and testing. The purpose of this project would be to rigorously study avian community at the NWTC and surrounding off-site areas to document conditions and affects of wind facility on those avian communities.

The avian monitoring program would consist of three main activities: 1. Year-round avian use survey of the NWTC property; 2. Breeding bird survey of the NWTC; and 3. A bird and bat mortality study associated with the aerial structures on the NWTC (e.g. met towers and turbine blades). The year-round avian use visual survey would be conducted at six points on the property and six selected points in nearby reference areas, and would be observed throughout the course of the project. The breeding bird survey would consist of transect walking surveys along ten established transect routes spaced about 100 meters apart. These surveys would occur weekly during the breeding months to ascertain breeding bird densities on the NWTC, and one off-site transect would be surveyed as well to provide a point of reference for data interpretation. The mortality surveys would be conducted throughout the term of the project (one year or greater), with a higher frequency of surveys during migration months. Mortality surveys would be conducted on the NWTC property only and would include the following: 1. Standardized carcass searches; 2. Searcher Efficiency Trials; and 3. Carcass Removal Trials. The standardized carcass search would consist of transect walking surveys in square search plots radiating out from the met towers and turbines locations onsite. The searcher efficiency trials would utilize the same areas as the standardized carcass surveys, and would use non-native or farm-raised species to estimate the percentage of fatalities which are found by searchers. This data would be used to adjust the raw number of carcasses found in the standardized carcass study to correct for detection bias. The searcher efficiency trials would require 10 large bird and 25 small bird carcasses for each season. The objective of the carcass removal trials would be to estimate the length of time fatalities remain in the search area and therefore utilized to adjust actual carcass counts for removal bias. Similar to the searcher efficiency trials, the carcass removal trials would require 10 large bird and 25 small bird carcasses for each season. Additional details of survey methodologies can be found in the NREL Scope of Work and the Study Plan for Monitoring Avian Use and Mortality (WEST 2009) in the PMC under this project (NREL-10-014). The survey tasks would last from late winter 2010 through early winter 2011.

A programmatic environmental assessment, the Final Site Wide Environmental Assessment of National Renewable Energy Laboratory's National Wind Technology Center (DOE/EA-1378), was conducted for the NWTC in May 2002. Within the proposed action analyzed was the installation of several additional multi-megawatt wind turbines, met towers, and other aerial structures. While this proposed project was not formally identified as a mitigating measure

within the SWEA or the May 2002 Finding of No Significant Impact (FONSI) determination, it would serve that purpose by providing scientific qualitative data on the impacts of the multi-megawatt wind turbines and continued installation of met towers using guy wires to avian species at the NWTC.

Permits with the Colorado Department of Wildlife (CDOW) and the U.S. Fish and Wildlife Service (USFWS) would be filed to handle carcasses used for the searcher efficiency and carcass removal trials. NREL and its contractor would obtain carcasses from local wildlife rehabilitation centers. This project would not impact any threatened or endangered species or critical habitats, and would provide useful information on the potential impacts of met towers and wind turbines on avian use, breeding, and mortality. Surveys would occur on foot and vehicular traffic would be restricted to existing roads. Survey areas would include areas containing ephemeral drainages and seeps, and near an ephemeral pond in the Conservation Management Area, but no impacts to wetlands or water bodies are anticipated. This project would not cause any land disturbing activities or impact any known cultural resources. Furthermore, this project would not result an increase generation of hazard waste, usage of hazardous materials, or point-source air emissions onsite.

Based upon information above, as well as the assessments and findings by the May 2002 Final Site-Wide Environmental Assessment of the National Renewable Energy Laboratory's (NREL) National Wind Technology Center (DOE/EA 1378) and its May 2002 Finding of No Significant Impact (FONSI), this project's impacts to the human and natural environment can be deemed less than significant and this project would qualify for Categorical Exclusion B3.1 (i).

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

None Given.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Lori Plummer *Lori Plummer* Date: 5/13/2010
NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

- Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.
- Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____
Field Office Manager