

PMC-EF2a

(20402)

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



RECIPIENT: Energy & Environmental Research Center

STATE: ND

PROJECT TITLE : Great Plains Wind Energy Transmission Development Project - Task 1 Rescope

| | | | |
|--|--------------------------------------|----------------------------|-------------------|
| Funding Opportunity Announcement Number | Procurement Instrument Number | NEPA Control Number | CID Number |
| CDP | DE-FG36-05GO85037 | GFO-05-126C | 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:

- A9** Information gathering (including, but not limited to, literature surveys, inventories, audits), data analysis (including computer modeling), document preparation (such as conceptual design or feasibility studies, analytical energy supply and demand studies), and dissemination (including, but not limited to, document mailings, publication, and distribution; and classroom training and informational programs), but not including site characterization or environmental monitoring.
- B5.1** Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.
- 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 rescoping of Task 1 now consists of the installation of one, 5kW turbine at the project location. The Endurance S-250, manufactured by Windward Engineering and marketed nationally by BTI Wind Energy, LLC (BTI), is a three-bladed, upwind, horizontal-axis wind turbine with a maximum electrical output of 5.0 kW at 14 m/s hub-height wind speed.

In addition to the wind turbines, the EERC intends to install one wind monitoring system to assist in the analysis and research of the wind turbines and associated electrical production. The wind monitoring system is a 40-m tall guyed tower with wind speed and direction measurement devices at various heights on the tower. It is totally self powered and requires no external power supply nor does it require any foundation structures.

All local approvals and permits for the project have been secured or are in-process.

A review was conducted for threatened and endangered species in Grand Forks County, North Dakota. The endangered Whooping Crane is listed as an endangered species in the county. A telephone inquiry and interview with the FWS District Office in Devils Lake, North Dakota who has jurisdiction over Grand Forks County was conducted regarding the species. They stated that based on the Whooping Crane migration corridor location (150 miles west), siting of the turbine and wind monitoring station within a busy industrial park, and the small size of the turbine and station, they see no issues of effect for the species. This information supports a "no affect" determination (under Section 7 of the Endangered Species Act) by the DOE regarding the Whooping Crane.

With regard to noise impacts, based on studies performed by NREL and others, it is expected that at a distance greater than 100 feet from the turbine the noise levels should not exceed background noise and at 50 feet from the wind turbine, the decibel levels should be no greater than 60 dB. Given the remote location of the site (in relation to residences) and the site's proximity to industrial businesses, noise produced by the wind turbine, as well as visual impacts, should not be an issue.

No other environmental resource impacts are expected from implementation of the remaining scope of the proposed

project, therefore, in addition to prior tasks of the project, this rescoped effort is approved under CX criteria A9, B3.1 (h) and B5.1.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

Greg Fasano (JAD) - 8/2/2010

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:


NEPA Compliance Officer

Date:

8/3/10

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:

Field Office Manager

Date:
