

PMC-EF2a

(20102)

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



RECIPIENT: Texas Tech University

STATE: TX

**PROJECT TITLE :** Full Scale Testing, Characterization, System Optimization, Demonstration of Grid Connected Wind Turbines and Wind Powered Water Desalination Project

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
CDP Renewal	DE-FG36-06GO86092	GFO-10-377	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:

- 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:
- 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.
- 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.

## Rational for determination:

This is a renewal for the award DE-FG36-06GO86092, which received a CX 5.1 dated 8/30/2006.

Texas Tech University proposes to use Congressionally Directed federal funds to continue their ongoing testing, characterization, system optimization and modeling of grid-connected utility-scale wind turbines designed for wind regimes such as those in the Southern Great Plains, as well as continued research on wind driven power for reverse osmosis for the desalination systems.

This project will involve research and development of Great Plains wind characteristics and their effects on turbine reliability, research and development of integrated wind-water desalination systems, outreach and education, and project management and reporting.

The turbine used for this research has been previously erected and is currently being used for this ongoing research. Activities will involve information gathering; field data collection activities from wind systems; maintaining and updating wind data acquisition equipment on the existing 200-m met tower and horizontal array at Reese Technology Center; operation and maintenance of wind turbine and reverse osmosis desalination systems; and outreach conferences and educational tool development.

This project comprises information gathering, outreach activities, field monitoring and actions to conserve energy; therefore a CX A9, B3.1 and B5.1 will apply.

**NEPA PROVISION**

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

Eugene Brown 5/27/2010  
Reviewed by Laura Margason 5/27/2010.

**SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.**

NEPA Compliance Officer Signature:   
NEPA Compliance Officer

Date: 5/28/10

**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: \_\_\_\_\_