

PMC-EF2a

(2010)

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



RECIPIENT: Utah State University

STATE: UT

PROJECT TITLE : Wide Area Wind Field Monitoring

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-PS36-09GO99009	DE-EE0002734	GFO-10-160	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.
- B3.6** Siting, construction (or modification), operation, and decommissioning of facilities for indoor bench-scale research projects and conventional laboratory operations (for example, preparation of chemical standards and sample analysis); small-scale research and development projects; and small-scale pilot projects (generally less than two years) conducted to verify a concept before demonstration actions. Construction (or modification) will be within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible).

Rational for determination:

Utah State University (USU) will be using DOE ARRA funding to evaluate the feasibility of deriving local wind vector fields from 3D imagery of atmospheric aerosol concentrations (atmospheric particulates) collected via an advanced lidar measuring system.

Project activities include research and development at USU's Center for Active Sensing and Imaging and University Research Foundation facilities. The work will involve the development of an eye-safe lidar system prototype that will perform wind characterization. They will be developing this system for aerosol detection and studying the phenomena of aerosol distribution. The objective of this technology is to advance system mapping and monitoring ability of local wind fields for wind energy development.

Project work will take place indoors and outside within the confines of the laboratory grounds. An R&D questionnaire has been submitted which thoroughly addresses the University's safety and chemical handling protocols.

This project comprises information gathering and conventional research and development studies in existing laboratory facilities; therefore a CX A9 and B3.6 will apply.

**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:

NEPA Compliance Officer

Date:

2/1/2010

**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

01/25/10  
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