

PMC-ND

(1.08.09.13)

**U.S. DEPARTMENT OF ENERGY
OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY
NEPA DETERMINATION**

**RECIPIENT:** Texas Tech University**STATE:** TX**PROJECT TITLE:** The Incubation of Next-Generation Radar Technologies to Lower the Cost of Wind Energy**Funding Opportunity Announcement Number**

DE-FOA-0000978

Procurement Instrument Number

DE-EE0006804

NEPA Control Number

GFO-0006804-002

CID Number

GO6804

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, analysis, and dissemination Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)

B5.15 Small-scale renewable energy research and development and pilot projects

Small-scale renewable energy research and development projects and small-scale pilot projects, provided that the projects are located within a previously disturbed or developed area. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to Texas Tech University (TTU) to develop, design, construct, test and validate new radar technology specifically focused on the wind industry.

A previous NEPA determination (GFO-0006804-001, CX A9, B5.15, 11/26/14) has been completed that included Tasks 1, 2, 5, and 6 and Subtasks 3.1 and 3.2. This NEPA determination applies to Subtask 3.3 and Task 4.

Subtask 3.3 would include field deployment of the radar and associated infrastructure at the National Wind Institute (NWI) Field Site located at the Reese Technology Center (RTC) west of Lubbock, TX. The site is a dedicated university field site for wind-related research. The larger RTC site contains buildings, instrumented towers and research scale turbines, including the DOE Sandia National Laboratory SWIFT facility. The installation of the radar system at the site would require leveling, spreading gravel, and construction of a 10 foot by 25 foot by 6 inch thick concrete pad for the foundation of the radar system as well as the digging of a 125 foot trench for electrical transmission. The finalized radar system would be 28 feet tall and due to the presence of the aforementioned structures at the site is not expected to result in adverse visual impacts. There would be minor disturbances to the adjacent land as cranes, lifts and forklifts are used during the installation process. As the RTC site is located on a decommissioned Air Force base, there is concern about soil contamination. The lease between the Lubbock Reese Redevelopment Authority and Texas Tech University restricts the removal of any soil from the site. Given the limited nature of the foundation work, all soil would remain on site. Existing facilities would not be impacted as a result of the proposed project. The RTC site is predominantly disturbed grassland with developed and landscaped areas; therefore, DOE has determined that adverse effects to threatened and endangered species, wetlands or cultural resources are not likely as a result of the proposed project.

Task 4 would include testing and validation of the deployed radar system. Activities for this task include installing and proofing software and running the radar system to collect data.

TTU maintains a full set of policies and procedures related to safety. This regimen would be enforced by the university for its own employees and any local contractors that would be employed to provide services on site.

Based on review of the project information and the above analysis, DOE has determined that the Subtask 3.3 and Task 4 would not have a significant individual or cumulative impact to human health and/or environment. DOE has determined that the above identified tasks are consistent with actions contained in DOE categorical exclusion A9 "information gathering, data analysis and computer modeling," B5.15 "small scale renewable energy research and development and pilot projects," and is categorically excluded from further NEPA review.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

If you intend to make changes to the scope or objective of your project you are required to contact the Project Officer identified in Block 11 of the Notice of Financial Assistance Award before proceeding. You must receive notification of approval from the DOE Contracting Officer prior to commencing with work beyond that currently approved.

Note to Specialist :

Wind Program

This NEPA determination does not require a tailored NEPA provision
NEPA review completed by Logan Sholar on 4/13/15

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:



NEPA Compliance Officer

Date:

4/15/2015

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: