

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	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000978	DE-EE0006804	GFO-0006804-001	

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. The project would include the development and testing of radar systems, as well as the development and testing of software to analyze the acquired data. Testing of the radar systems would initially occur in a laboratory setting, but eventually would include testing in the field. A site for field testing has not yet been identified. Therefore some tasks cannot be analyzed at this time.

TTU would perform six tasks for this project. These include:

- Task 1 – Finalize Engineering Design and Manufacturing Plan
- Task 2 – Software Development
- Task 3 – Prototype Procurement, Integration, Development, and Testing
- Task 4- Integrated System Testing/Validation
- Task 5 – Project Management
- Task 6 – Dissemination of Results

Tasks 1, 2, 5 and 6 would be limited to information gathering, analysis and dissemination. These tasks would be allowable tasks under this NEPA determination.

Task 3 would include procurement of the radar component hardware, integration of the hardware, laboratory testing of the radar, and field testing of the radar. Subtask 3.1 would include procurement and Subtask 3.2 would include integration of components and laboratory testing. After Subtask 3.2 there would be a GO/NO GO decision. Subtask 3.3 would include field deployment of the radar. Deployment would include any appropriate earthwork, foundation, electrical, network communications, etc. Electrical connections would include construction of a 10 x 25 foot concrete pad foundation approximately 6 inches thick, and the connection of 230 VAC, 3-phase, 60 cycle power. A specific site for the field testing has not yet been finalized and therefore this subtask cannot be analyzed at this time. Allowable tasks under Task 3 would include procurement, integration, and laboratory testing (Subtasks 3.1 and 3.2). Subtask 3.3 is prohibited and subject to additional NEPA review once a specific site has been identified.

Task 4 would include field testing of the integrated radar system. Because a specific site for the field testing has not yet been identified, this task cannot be analyzed at this time. Task 4 is prohibited and subject to additional NEPA review once a specific site has been identified.

Based on review of the project information and the above analysis, DOE has determined that the Tasks 1, 2, 5, 6, and Subtasks 3.1 and 3.2 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 conditional NEPA determination for this award, and funding for certain tasks under this award is contingent upon the final NEPA determination.

Insert the following language in the award:

You are restricted from taking any action using federal funds, which would have an adverse affect on the environment or limit the choice of reasonable alternatives prior to DOE/NNSA providing either a NEPA clearance or a final NEPA decision regarding the project.

Prohibited actions include:

- Subtask 3.3 – Field deployment and system integration
- Task 4 – Integrated System Testing/Validation at the NWI Field Site

This restriction does not preclude you from:

- Task 1, 2, 5, 6 – all activities
- Subtask 3.1, 3.2 – all activities

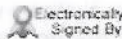
If you move forward with activities that are not authorized for federal funding by the DOE Contracting Officer in advance of the final NEPA decision, you are doing so at risk of not receiving federal funding and such costs may not be recognized as allowable cost share.

Note to Specialist :

Wind Program
This NEPA determination requires a tailored NEPA provision
NEPA review completed by Roak Parker on 11/26/2014

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____



Signed By: Kristin Kerwin
NEPA Compliance Officer

Date: 12/10/2014

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: _____