

PMC-ND

(1.08.09.13)

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

**RECIPIENT:**Bat Conservation International**STATE:** PA**PROJECT TITLE** Evaluating the Effectiveness of Ultrasonic Acoustic Deterrents in Reducing Bat Fatalities at Wind Energy Facilities

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0001181	DE-EE0007036	GFO-0007036-002	GO7036

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.)
- B3.11 Outdoor tests and experiments on materials and equipment components** Outdoor tests and experiments for the development, quality assurance, or reliability of materials and equipment (including, but not limited to, weapon system components) under controlled conditions. Covered actions include, but are not limited to, burn tests (such as tests of electric cable fire resistance or the combustion characteristics of fuels), impact tests (such as pneumatic ejector tests using earthen embankments or concrete slabs designated and routinely used for that purpose), or drop, puncture, water-immersion, or thermal tests. Covered actions would not involve source, special nuclear, or byproduct materials, except encapsulated sources manufactured to applicable standards that contain source, special nuclear, or byproduct materials may be used for nondestructive actions such as detector/sensor development and testing and first responder field training.

Rationale for determination:

The U.S. Department of Energy (DOE) proposes to provide federal funding to Bat Conservation International (BCI) to determine the best placement and orientation of Ultrasonic Acoustic Deterrents (UADs) on wind turbines. The goals are to assess the functionality of a newly redesigned UAD in reducing bat fatality, and to compare the costs and benefits of UADs.

The proposed project includes eight tasks. These include:

- Task 1.0: Initial Installation Plan
- Task 2.0: Initial Manufacturing of UADs
- Task 3.0: Initial Installation and Monitoring of UADs
- Task 4.0: Analysis and Reporting of Preliminary Functionality Test of UADs
- Task 5.0: Final Manufacturing and Installation of UADs
- Task 6.0: Comparative Study
- Task 7.0: Final Analysis of Comparative Study
- Task 8.0: Final Report, Review, and Dissemination

This recipient previously received a NEPA determination (GFO-0007036-001; CX-A9, CX-B3.6, 9/8/2015) for activities associated with Task 1.0 Initial Installation Plan and Task 2.0 Initial Manufacturing of UADs. Activities for Task 1.0 included information gathering regarding the placement and orientation of UADs on the nacelle, and completing a guidance document for UAD installation. Activities for Task 2.0 included manufacturing of a test-set of UADs and the associated mounting hardware and lab testing to assess their functionality and weatherization.

This NEPA review applies to Task 3.0 Initial Installation and Monitoring of UADs and Task 4.0 Analysis and Reporting of Preliminary Functionality Test of UADs only. Proposed activities for Task 3.0 include installing 10 acoustic deterrents on 2 turbines (5 deterrents per turbine) along with installing thermal video cameras to record bat activity. The UADs transmit ultrasonic sound in the range of 20–60 kHz and are intended to deter bats from the rotor-swept area. Proposed activities for Task 4.0 include conducting analysis on the results from Task 3 and completing a report on those results.

Task 3 activities would occur at the South Chestnut Wind Power Plant (SCWPP). The SCWPP is a 23-turbine wind

farm operated by Iberdrola Renewables. The facility is located on privately owned property in Fayette County, Pennsylvania.

Three Endangered Species Act listed bat species occur in the SCWWP vicinity. These include the endangered Indiana bat (*Myotis sodalists*), the threatened Northern Long-eared bat (*Myotis septentrionalis*), and the Endangered Virginia Big-eared bat (*Plecotus townsendii virginianus*). The field study timeframe would occur between July 1 and September 30, which corresponds to the highest level of bat activity and when the peak of typical bat/wind farm mortalities occur. DOE contacted Melinda Turner of the U.S. Fish & Wildlife Service (FWS) Pennsylvania Field Office regarding this proposed project. FWS did not have any concern about the project as proposed. Based on discussions with FWS, DOE has determined that the proposed activities would have "no effect" - meaning that threatened or endangered species or critical habitat will be not be affected by the proposed activities. No further consultation with the FWS is required.

The completion of Task 4 corresponds with a Go/No-Go Decision Point. If the project receives a Go decision, further NEPA review would be required before any additional tasks may be undertaken.

Based on review of project information and the above analysis, DOE has determined that Tasks 3.0 and 4.0 would not have a significant individual or cumulative impact to human health and/or environment. DOE has determined that the activities associated with Tasks 3.0 and 4.0 are consistent with actions outlined in DOE categorical exclusions A9 "Information gathering, analysis, and dissemination" and B3.11 "Outdoor tests and experiments on materials and equipment components" and is therefore 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/NSA providing either a NEPA clearance or a final NEPA decision regarding the project.

Prohibited actions include:

- Task 5.0: Final Manufacturing and Installation of UADs
 - Task 6.0: Comparative Study
 - Task 7.0: Final Analysis of Comparative Study
 - Task 8.0: Final Report, Review, and Dissemination
- This restriction does not preclude you from:
- Task 1.0: Initial Installation Plan
 - Task 2.0: Initial Manufacturing of UADs
 - Task 3.0: Initial Installation and Monitoring of UADs
 - Task 4.0: Analysis and Reporting of Preliminary Functionality Test of UADs

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.

Insert the following language in the award:


You are required to:
The recipient is required to submit an EQ-1 for Tasks 5-8 which will require additional NEPA review prior to beginning work on activities described in those tasks.

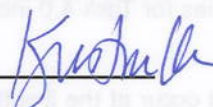
Note to Specialist :

Wind Energy Technologies Office
This NEPA determination requires a tailored NEPA provision.
Review completed by Chris Rowe on 6/10/2016.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:

 Electronically Signed By: Kristin Kerwin
NEPA Compliance Officer



Date: 6/10/2016

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: _____