

PMC-EF2a

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



(2.0/4.02)

RECIPIENT: Oregon State University

STATE: OR

PROJECT TITLE : A Synchronized Sensor Array for Remote Monitoring of Avian and Bat Interactions with Offshore Renewable Energy Facilities

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
DE-FOA-0000414	DE-EE0005363	GFO-0005363-001	EEO

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.)

**A11 Technical advice and assistance to organizations**

Technical advice and planning assistance to international, national, state, and local organizations.

**B3.3 Research related to conservation of fish, wildlife, and cultural resources**

Field and laboratory research, inventory, and information collection activities that are directly related to the conservation of fish and wildlife resources or to the protection of cultural resources, provided that such activities would not have the potential to cause significant impacts on fish and wildlife habitat or populations or to cultural resources.

**B3.6 Small-scale research and development, laboratory operations, and pilot projects**

Siting, construction, modification, operation, and decommissioning of facilities for smallscale research and development projects; conventional laboratory operations (such as preparation of chemical standards and sample analysis); and small-scale pilot projects (generally less than 2 years) frequently conducted to verify a concept before demonstration actions, provided that construction or modification would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Not included in this category are demonstration actions, meaning actions that are undertaken at a scale to show whether a technology would be viable on a larger scale and suitable for commercial deployment.

**B3.1 Site characterization and environmental monitoring**

Site characterization and environmental monitoring (including, but not limited to, siting, construction, modification, operation, and dismantlement and removal or otherwise proper closure (such as of a well) 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). Such activities would be designed in conformance with applicable requirements and use best management practices to limit the potential effects of any resultant ground disturbance. Covered activities include, but are not limited to, site characterization and environmental monitoring under CERCLA and RCRA. (This class of actions excludes activities in aquatic environments. See B3.16 of this appendix for such activities.) Specific activities include, but are not limited to: (a) Geological, geophysical (such as gravity, magnetic, electrical, seismic, radar, and temperature gradient), geochemical, and engineering surveys and mapping, and the establishment of survey marks. Seismic techniques would not include large-scale reflection or refraction testing; (b) Installation and operation of field instruments (such as stream-gauging stations or flow-measuring devices, telemetry systems, geochemical monitoring tools, and geophysical exploration tools); (c) Drilling of wells for sampling or monitoring of groundwater or the vadose (unsaturated) zone, well logging, and installation of water-level recording devices in wells; (d) Aquifer and underground reservoir response testing; (e) Installation and operation of ambient air monitoring equipment; (f) Sampling and characterization of water, soil, rock, or contaminants (such as drilling using truck- or mobile-scale equipment, and modification, use, and plugging of boreholes); (g) Sampling and characterization of water effluents, air emissions, or solid waste streams; (h) Installation and operation of meteorological towers and associated activities (such as assessment of potential wind energy resources); (i) Sampling of flora or fauna; and (j) Archeological, historic, and cultural resource identification in compliance with 36 CFR part 800 and 43 CFR part 7.

**DOE/EA 1378 (NREL NWTC)**

Final Site-Wide Environmental Assessment of the National Renewable Energy Laboratory's National Wind Technology Center

## Rational for determination:

DOE is proposing to provide federal funding to Oregon State University (OSU) to experimentally test, and deploy an integrated sensor array that would continuously monitor interactions (impacts) between avian and bat species with existing wind turbines. This study would include information gathering, data analysis, technical advice, modeling, and reporting.

OSU would meet with an advisory group to assist with developing a passive monitoring system. Laboratory and field testing would take place at the following locations: Hatfield Marine Science Center, Oregon State University, Newport, OR, 97365; School of Mechanical, Industrial & Manufacturing Engineering, Oregon State University, Corvallis, OR, 97331; Department of Mechanical Engineering, University of Washington, Seattle, WA, 98195; Grayland Washington, operated by Coastal Community Action Program, 117 East 3rd Street, Aberdeen, Washington, 98520; Mesalands Community College, 911 South 10th Street, Tucumcari, New Mexico 88401; National Renewable Energy Lab, 1617 Cole Blvd., Golden Colorado, 8040. The data collected would be modeled and reported at conferences.

According to the R&D laboratory questionnaire: no additional permits are needed, and there would be no generation of air emissions associated with this work; all wastes are disposed of properly at approved treatment, storage, recycling, or disposal facilities; Environmental Health, and Safety Plans (also in compliance with OSHA and industry standards) are in place.

Additionally, no habitat for any Threatened or Endangered (T&E) species would be removed, and no disturbance would occur to T&E species due to the temporary nature of monitoring instrumentation. No cultural resources or historic properties would be affected due to the temporary nature of monitoring instrumentation.

There should be no waste generated with this project. This project comprises information gathering, technical advice, site characterization, research related to the conservation of wildlife, and small-scale research and development. Therefore, the DOE has categorized this project into Categorical Exclusions A9, A11, B3.1, B3.3, and B3.6. The testing activities proposed at NREL's National Wind Technology Center are consistent with activities analyzed in the site-wide environmental assessment (DOE/EA-1378).

Budget: \$ 600,000 (DOE); \$ 162,001 (cost share)

#### NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

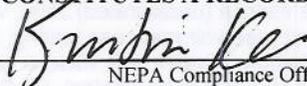
If you intend to make changes to the scope or objective of your project you are required to contact the Project Officer identified in Block 11 of the Notice of Financial Assistance Award before proceeding. You must receive notification of approval from the DOE Contracting Officer prior to commencing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

Note to Specialist :

EF2A by Christopher Carusona II

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

NEPA Compliance Officer Signature: \_\_\_\_\_

  
NEPA Compliance Officer

Date: \_\_\_\_\_

2/16/2012

#### 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.