

PMC-ND

(1.08.09.13)

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

**RECIPIENT:** Rebecca Barthelmie/Cornell University**STATE:** NY**PROJECT TITLE:** An integrated approach to offshore wind energy assessment: Great Lakes 3D Wind Experiment

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000923	DE-EE0005379	GFO-0005379-002	GO5379

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.
- B3.1 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.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to Cornell University to develop best practices for offshore wind measurements that are used to characterize wind resource and turbine loads in the offshore environment.

DOE completed a previous NEPA determination for Tasks 1 through 6 (GFO-0005379-001, CX A9, B3.1, B3.2, and B3.16, 2/29/2012) of this award which included designing, planning, and installation of data collection systems at the Meadow Lake Wind Farm in Indiana and on existing buoys in Lake Erie, as well as conducting data analysis and computer

modeling. This NEPA determination applies to Task 7 only.

Proposed project activities include collecting wind measurements using standard measurement techniques at the wind energy test site administered by the Wind Energy Institute of Canada (WEICan) on Prince Edward Island, Canada. The wind site is an existing facility with multiple small and large wind turbines and meteorological towers. Monitoring equipment would be mounted on an existing meteorological tower, installed at the mast base and at the associated sub-station. Once data is collected at the wind site, the equipment would be moved to the existing, 16 turbine, North Cape wind farm on Prince Edward Island, Canada and placed in a similar configuration as it was at the wind test site. North Cape wind farm is immediately south of the WEICan site. Data analysis and modeling would occur at Cornell University in Ithaca, NY. The facility at the wind site is designed for this type of research; therefore, no modifications or new permits, additional licenses and/or authorizations would be necessary. This project would not involve the modification of the existing facility or the construction of new buildings. There would be no ground disturbing activities. The proposed project is temporary in nature, and there would be no change in the use, mission or operation of the wind site or the wind farm; therefore the proposed project is not expected to result in adverse effects to threatened and endangered species, wetlands, or floodplains and would not create adverse visual impacts.

Based on a review of the project information and the above analysis, DOE has determined that the proposed project would not have a significant individual or cumulative impact to human health and/or environment. DOE has determined that this project is consistent with actions outlined in DOE categorical exclusions A9 "information gathering," A11 "technical advice" and B3.1 "Site characterization and environmental monitoring" and is therefore 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 Power Program

This NEPA Determination does NOT require a tailored NEPA provision.
NEPA review completed by Logan Sholar, 6/5/15

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:


NEPA Compliance Officer

Date:

6/12/2015

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:
