PMC-EF2a

(2.04.02)

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



RECIPIENT: The Research Foundation of the State University of New York

STATE: NY

PROJECT

Improving atmospheric models for offshore wind resource mapping and prediction using LIDAR, aircraft,

TITLE: and in-ocean observations

Funding Opportunity Announcement Number DE-FOA-0000414

**Procurement Instrument Number** DE-EE0005377

NEPA Control Number CID Number

GFO-0005377-002

GO5377

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:

**B3.2** Aviation activities

B3.1 Site characterization and environmental monitoring

Aviation activities for survey, monitoring, or security purposes that comply with Federal Aviation Administration regulations.

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 smallscale 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.

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.)

## Rational for determination:

This NEPA determination is being conducted on tasks that have been revised from the original project activities. This review will examine tasks 1.0 and task 8.0, the remaining tasks are unchanged and therefore the original determination made on 2/22/2012 (EE00005377-001) still applies.

Due to corroded arms on the Cape Wind (CW) tower, Research Foundation of State University of New York (SUNY) is unable to mount instruments that were to be used in sub-task 1.0 and Task 8.0 to collect data for their project that is studying the environmental factors that influence wind turbine structures along the Atlantic coast. SUNY is now proposing to conduct aerial surveys in order to collect the necessary data to complete this project. Flight surveys would occur during the winter of 2012 and in the spring and summer through July of 2013. These flights would be then be repeated during the same timeframe in 2014 (Task 8).

SUNY would employ a Long-EZ aircraft that would be operated by a certified subcontractor, UltraPure Inc, to collect vertical profiles of temperature, winds, and turbulence near the CW tower located on Horseshoe Shoal in Nantucket Sound. All aviation activities would follow Federal Aviation Administration (FAA) safety, and operating procedures. The air space of interest is not restricted, and under Visual Flight Rules, no formal FAA flight plan is required. However for safety, during flights, the aircraft will be in contact with relevant air traffic control operators. These actions involve

aviation activities for survey and monitoring that comply with Federal Aviation Administration regulations; therefore the DOE CXB3.2 applies.

In the spring of 2013 the CW tower is expected to be repaired, after which SUNY would then install an optical wave sensor devise as a part of their task 2 activities. The impacts related to this activity have already been evaluated under the previous NEPA determination and the CX B3.1 would still apply.

Task 8 would also involve analyzing and conducting computer models and simulations of the data collected in task 2. The impacts related to this activity have already been evaluated under the previous NEPA determination and the CX A9 would still apply.

SUNY's proposed project activities are consistent with information gathering, computer modeling, site characterization/environmental monitoring (not in an ocean environment), and aviation activities; therefore DOE has determined that CX A9, B3.1, and B3.2 apply and that no further NEPA review is necessary.

## 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: Review completed by Laura Margason 12-12-12 Budget: DOE: \$675,219 FFRDC: \$0 Cost Share: \$176,029 Total: \$851,248 SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION. NEPA Compliance Officer Signature: 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 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