PMC-EF2a
(2.04.02)

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

RECIPIENT: University of Michigan **STATE:** MI

PROJECT TITLE : Management and analysis of extreme wave and ice action in the Great Lakes for offshore wind platform design

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000414	EE0005376	GFO-0005376-001	0

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:

B3.1 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.

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:

University of Michigan (UM) with the assistance of the National Oceanic and Atmospheric Administration (NOAA) would utilize DOE and cost share funds to develop, research, model, and publish a study of environmental factors that influence the development of ice and environmental loading on offshore wind turbine structures in the Great Lakes. This study would include information gathering, site selection, metrological instrument installation, research, data gathering, reporting, technical advice and assistance.

Field instrument testing and evaluation will include shore-based radar to monitor the movement of ice floes, installation of an instrument package on an existing structure to take conventional measurements including temperature, solar radiation, and wind speed, and the deployment a newly designed system intended to provide data on environmental parameters and loading through the ice-cover season. All field instruments will be installed on existing structures and on a temporary basis.

UM and NOAA are partners in operating Great Lakes research vessels. Both parties follow the NOAA Small Boat Safety Program (Order 209-125) and NOAA Small Boat Standards and Procedures Manual that ensure safe operation and protection of operators and passengers on the research vessels.

Budget: $ 692,782 (DOE); $ 227,445 (cost share)

The University of Michigan will cooperate with NOAA and the US Coast Guard when attaching instrumentation onto

their equipment and the University will acquire any necessary permission from private owners prior to engaging in activities. Where applicable, University of Michigan will meet other Federal Agency rules and regulations, such as the Bureau of Land Management, National Park Service and U.S. Coast Guard.

This project comprises research and modeling efforts as well as environmental monitoring. All environmental monitoring activities are in conformance with applicable requirements. CX A9 and B3.1 apply.

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.

Insert the following language in the award:

You are required to:
The University of Michigan will cooperate with NOAA and the US Coast Guard when attaching instrumentation onto their equipment and the University will acquire any necessary permission from private owners prior to engaging in activities. Where applicable, University of Michigan will meet other Federal Agency rules and regulations, such as the Bureau of Land Management, National Park Service and U.S. Coast Guard.

Note to Specialist :

EF2A by Christopher Carusona II

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 1/9/2012
NEPA Compliance Officer

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: _____ Date: _____
Field Office Manager