

PMC-EF2a

(2010)

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



RECIPIENT: University of Maine

STATE: ME

**PROJECT TITLE :** The University of Maine's "New England Aqua Ventus I" Program

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
DE-FOA-000410	DE-EE0005990	GFO-0005990-001	

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:

<b>A9 Information gathering, analysis, and dissemination</b>	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.)
<b>B3.6 Small-scale research and development, laboratory operations, and pilot projects</b>	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.

Rational for determination:

CX A9, B3.6 and previous environmental analyses under DOE/EA 1972 apply to project activities proposed under this award.

The University of Maine (UMaine) is proposing to use Department of Energy (DOE) funding to further their research and design efforts for the planning of a 12 MW, 2 turbine, pilot floating wind farm off the coast of Maine. This NEPA determination applies to Budget Period (BP) 1, tasks 1.0 – 6.0, which include preliminary activities, such as information gathering, computer based modeling, project planning, design work, and environmental monitoring. This NEPA determination does not apply to Budget Periods 2-5 as they are contingent upon BP1 activities and progress. Upon completion of BP1, only three of the seven awards selected under DOE's Offshore Wind FOA0000410 will be selected to move on to BP 2-5 activities.

Primary activities proposed under the UMaine project include numerical modeling, tank testing, and preliminary design of UMaine's VoltumUS full- scale floating wind turbine platform. University researchers will continue to collect metocean data from buoys currently located at the test site off Monhegan Island in the Gulf of Maine. Additional work during BP 1 would include ecological monitoring and physical environment data collection, permitting, and required permitting processes. Results from the research conducted under this project would then be published in journals and presented conferences as part of the award.

Tasks for this project are broken down as follows:

- Task 1 - Design (preliminary design activities)
- Task 2 - Installation, Operations, and Maintenance (design and geophysical activities)
- Task 3 - Environmental/Ecological Monitoring and Permitting (planning and environmental monitoring/studies)
- Task 4 - Electrical Infrastructure (design and planning activities)
- Task 5 - LCOE Analysis (research and planning activities)
- Task 6 - Budget Period 1 Down-Selection (research and reporting)

During Task 1 UMaine would continue to work on platform and turbine tower design features. These activities are all research, data analysis, and computer modeling activities. However, UMaine is also proposing to further design and then test their composite tower and floating platform design by testing scale models of each and testing them at

UMaine's Advanced Structures and Composites Center and/or at the wave/tank facilities at Marin Laboratory in the United Kingdom. R&D facility questionnaires for both facilities have been submitted to DOE and demonstrate that their facilities have established health, safety and waste disposal protocols and are compliant with local laws and permits. These actions involve routine research and development studies at existing facilities and are consistent with DOE CXB3.6 (conventional laboratory operations), and are categorically excluded from further NEPA review.

On September 26, 2012, DOE finalized and issued a Finding of No Significant Impacts for DOE/EA-1792. This environmental assessment (EA) analyzed the impacts of DOE allowing expenditure of congressionally directed funding to UMaine for their 1/3 scale offshore wind demonstration project. The scope of this EA also covered the environmental studies and monitoring planned for the Monhegan test site. These include:

- \* Geophysical data collection
- \* LIDAR and Metocean buoy deployment and operational data collection
- \* Bat echolocation detector on LIDAR buoy
- \* Noise dosimeters on the Metocean buoy
- \* Continued deployment of acoustic listening device for tagged fish
- \* Boat-based visual surveys (DOE EA pg. 23 and 24)
- \* ROV survey along cable route and for benthic fish
- \* Continued deployment of acoustic listening device for tagged fish
- \* Bat echolocation detectors at the Monhegan Island lighthouse

All studies proposed under this new award (Task 3.0) have been previously analyzed in DOE/EA 1792. DOE has also completed all required consultations with the National Marine Fisheries Service (NMFS) and the State Historical Preservation Office (SHPO) specific to these studies. NMFS concurred that they would have "No Affect" or "May Affect, but Not Likely to Adversely Affect" endangered and threatened species listed under the Endangered Species Act. NMFS also determined that these studies would have "No Adverse Effect" to species protected under the Magnuson-Stevens Fishery Conservation and Management Act and the Marine Mammal Protection Act. SHPO concurred with DOE's determination that these studies would have "No Adverse Effect" to historical properties or historical view sheds protected under the National Historic Preservation Act. These actions are consistent with those analyzed in DOE/EA-1792 and have been found to have no significant impacts to the marine environment.

The remaining activities proposed under this award involve preliminary design, project planning, computer modeling, and desktop research and are consistent with DOE CX A9 (Information gathering, desktop studies, and computer modeling) and are 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.

Insert the following language in the award:

You are required to:  
UMaine must continue to employ the mitigation and conservation measures as listed in the Applicant Committed Measures section of the DOE/EA-1792 (pgs. 23-26).

Note to Specialist :

NEPA review completed by Laura Margason on January 17, 2013

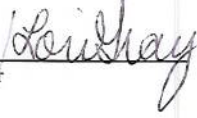
Funding breakdown:

Total project cost: \$7,367,765  
DOE share: \$4,000,000  
Recipient share: \$3,367,765

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

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

Electronically Signed By: Lori Gray  
NEPA Compliance Officer



Date: 1/17/2013

**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: \_\_\_\_\_