

PMC-EF2a

(20402)

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



RECIPIENT: Oregon State University

STATE: OR

**PROJECT TITLE :** National Marine Renewable Energy Center

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
DE-PS36-08GO98030	DE-FG36-08GO18179.M002	GFO-GO18179-003	GO18179

**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 (including, but not limited to, literature surveys, inventories, audits), data analysis (including computer modeling), document preparation (such as conceptual design or feasibility studies, analytical energy supply and demand studies), and dissemination (including, but not limited to, document mailings, publication, and distribution; and classroom training and informational programs), but not including site characterization or environmental monitoring.
- C12** Siting, construction, and operation of energy system prototypes including, but not limited to, wind resource, hydropower, geothermal, fossil fuel, biomass, and solar energy pilot projects.

## Rational for determination:

Oregon State University (OSU) has rescoped several sub-tasks of their project and is proposing a completely rescoped design for its mobile ocean test berth (MOTB). OSU will now develop a mid-scale buoy MOTB rather than a full-scale barge MOTB. This NEPA review is being done for tasks 4.1 (a-d) and 10.1 which have been rescoped. The remaining tasks have been determined to qualify for a DOE categorical exclusion in previous NEPA reviews.

Tasks for the revised SOPO and new scope are:

## Phase I -

- Task 1.0 Advanced Wave Forecasting Technologies (CX'd on 11/17/08)
- Task 2.0 Device and Array Optimization received (CX'd on 11/17/08)
- Task 3.0 Collaboration/Optimization with Marine Renewable and Other Renewable Energy Sources (CX'd on 11/17/08)
- Task 4.0 Integrated and Standardized Test Facility Development (new scope being reviewed)
  - Subtask 4.1 – Wave Energy
    - \*4.1(a) – Develop Ocean Test Site
    - \*4.1(b) – Design and Build Scaled MOTB
    - \*4.1(c) – Deploy Scaled MOTB:
    - \*4.1(d) – Full-scale Ocean Test Berth (research and preliminary design only)
  - Subtask 4.2 Tidal Energy (CX'd on 11/17/08)
- Task 5.0 Investigate the Compatibility of Marine Technologies with Environment, Fisheries and other Marine Resources (CX'd on 11/17/08)
- Task 6.0 Increased Reliability and Survivability of Marine Power Technologies (CX'd on 11/17/08)

## Phase II –

- Task 7.0 Advanced Wave Forecasting Technologies (CX'd on 9/24/2011)
- Task 8.0 Device and Array Optimization received (CX'd on 9/24/2011)
- Task 9.0 Collaboration/Optimization with Marine Renewable and Other Renewable Energy Sources (CX'd on 9/24/2011)
- Task 10.0 Integrated and Standardized Test Facility Development
  - \*Subtask 10.1 Wave Energy (new scope being reviewed)
  - Subtask 10.0 Tidal Energy (CX'd on 9/24/2011)
- Task 11.0 Investigate the Compatibility of Marine Technologies with Environment, Fisheries and other Marine Resources (CX'd on 9/24/2011)

Task 12.0 Increased Reliability and Survivability of Marine Power Technologies (CX'd on 9/24/2011)

Phase III – tasks 13.0 – 18.0 scope is undefined until a Go-No Go decision and future DOE grant funding becomes available; therefore a NEPA determination cannot be made on this phase at this time.

Task 4.1a involves outreach and permitting activities for the future MOTB testing site. This work will also assist in the development of the ongoing Environmental Assessment determined for other tasks. This task involves information gathering, document preparation and permitting activities consistent with actions covered under DOE CX and therefore is categorically excluded from further NEPA review.

Task 4.1b involves building and lab testing the newly designed MOTB buoy. Since this action is directly tied to the future MOTB and WEC deployment testing for the project, of which impacts are not known; therefore, this activity is on hold pending the outcome of the ongoing Environmental Assessment.. C12 applies to this sub-task.

Task 4.1c involves deploying the MOTB and two commercial WEC devices into the ocean for testing. Environmental impacts related to this sub-task are not known; therefore this task is on hold pending the outcome of the ongoing Environmental Assessment. C12 applies to this sub-task.

Task 4.1d involves research related to preliminary designs for a larger-scale MOTB.OSU also plans to conduct an international ocean energy market survey under this task for future planning of the technology. This task involves information gathering, dissemination and preliminary design activities consistent with actions covered under DOE CX A9 and therefore are categorically excluded from further NEPA review.

Task 10.1 is tied to sub-task 4.1b and involves the final design, construction and deployment of the MOTB, including the PADA module. This sub-task is directly tied to the future MOTB and WEC deployment testing for the project, of which impacts are not known; therefore, this activity is on hold pending the outcome of the ongoing Environmental Assessment. C12 applies to this sub-task.

Per the DOE NEPA implementing regulations (Appendix C to Subpart D to 10 CFR Part 1021 - C12), a preparation of an Environmental Assessment is required prior to allowing federal funds for this sub-tasks 4.1b, 4.1c and 10.1 of the proposed project. A C12 Environmental Assessment NEPA determination was previously signed by GO Manager on September 29, 2009. This determination still applies to the rescoped tasks 4.1b, 4.1c and 10.1 due to the similarity of the activities.

#### NEPA PROVISION

DOE has made a conditional NEPA determination for this award, and funding for certain tasks under this award is contingent upon the final NEPA determination.

Insert the following language in the award:

You are restricted from taking any action using federal funds, which would have an adverse affect on the environment or limit the choice of reasonable alternatives prior to DOE/NNSA providing either a NEPA clearance or a final NEPA decision regarding the project.

Prohibited actions include:

Sub-tasks 4.1b, 4.1c and 10.1

This restriction does not preclude you from:

All remaining tasks, other than those listed above, as listed in the revised SOPO.

Oregon State University is authorized to initiate the preparation of an EA by a third-party contractor, consistent with DOE NEPA implementing regulations.

If you move forward with activities that are not authorized for federal funding by the DOE Contracting Officer in advance of the final NEPA decision, you are doing so at risk of not receiving federal funding and such costs may not be recognized as allowable cost share.

Note to Specialist :

Sub-tasks 4.1b, 4.1c and 10.1 are on hold pending a final determination after the completion of the Environmental Assessment.

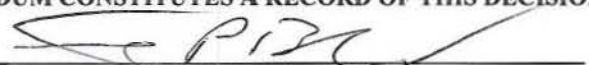
Phase 1 total funding = \$2,387,014 (DOE \$1,229,596/OSU\$1,157,418)

100% of funds have been released for this phase. Sub-tasks 4.1b-c are held but per recipient no funding is being applied to these tasks. This determination allowed \$613,159 of OSU cost-share to be used for sub-task 4.1a.

Phase 2 total funding = \$3,280,050 (DOE \$2,447,141/OSU\$4,187,277)  
NEPA hold on \$3,280,050 (DOE \$278,298/OSU \$3,001,753)

Review completed by Laura Margason on October 13, 2011

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

NEPA Compliance Officer Signature:   
NEPA Compliance Officer

Date: 10/18/11

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