

PMC-ND  
(1.08.09.13)

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



**RECIPIENT:** Northwest Energy Innovations

**STATE:** OR

**PROJECT TITLE :** Wave Energy Test – New Zealand Multi-Mode Technology Demonstration at the US Navy's Wave Energy Test Site

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
DE-FOA-0000705	DE-EE0006056	GFO-0006056-001	GO6056

**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:

**B3.6 Small-scale research and development, laboratory operations, and pilot projects** 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.

**Rationale for determination:**

The U.S. Department of Energy (DOE) is proposing to provide federal funding to Northwest Energy Innovations (NWEI) to redeploy their Wave Energy Technology-New Zealand (WET-NZ) Oregon Device at the U.S. Navy's Wave Energy Test Site (WETS) at the Marine Corp Base Hawaii (MCBH) to conduct open-ocean, grid connected testing. DOE funding would be used for mooring system design, grid interconnection design, device modification, deployment of the WET-NZ device and testing, evaluation and dissemination of information received.

The Tasks for this project are as follows:

- Task 1.0: Program Planning and Management
- Task 2.0: Mooring System Design
- Task 3.0: Grid Interconnection
- Task 4.0: Deployment
  - Subtask 4.1: Deployment Plan
  - Subtask 4.2: Permitting and NEPA
  - \*Subtask 4.3: Deployment
- \*Task 5.0: Testing, Evaluation and Dissemination
- Task 6.0: Device Modification

Tasks 1.0-4.2 have been reviewed and categorically excluded from further NEPA review on 1/8/2013 (GFO-00006056-001). This NEPA determination applies to Task 6 actions only.

Task 6 would involve making device modifications and optimization based on lessons learned from the prior in-ocean test conducted in Oregon in 2012. The hull, PowerPod, floats, hydraulic system, power and control systems, and mooring systems of the NWEI wave energy device would be modified and individually tested. These components will be separated from the fully assembled WET-NZ device in Oregon and shipped to Energy Hydraulics Limited facilities in New Zealand. Once modification and optimization is complete the components would be shipped to the Sea Engineering Facilities in Oahu, Hawaii and reassembled.

All task 6 activities would take place in existing laboratory and engineering facilities; each with established health, safety and waste handling protocols consistent with their local regulatory agency guidelines.

This NEPA determination does not apply to any marine deployment or post-deployment testing activities (\*Subtask 4.3 and \*Task 5.0), which are subject to further NEPA review prior to the authorization of federal funds.



DOE has determined that Task 6 is consistent with actions covered under DOE CX B3.6 (modification and operation for smallscale research and development projects); and therefore is categorically excluded from further NEPA review.

**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-task 4.3: Deployment

Task 5.0: Testing, Evaluation and Dissemination

This restriction does not preclude you from:

Task 1.0: Program Planning and Management

Task 2.0: Mooring System Design

Task 3.0: Grid Interconnection (planning)

Subtask 4.1: Deployment Plan

Subtask 4.2: Permitting and NEPA

Task 6.0: Device Modification

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 :

NEPA review completed by Laura Margason on September 19, 2013

This NEPA Determination requires a tailored NEPA provision.

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

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



Lori Gray  
NEPA Compliance Officer

*Lori Gray*

Date: 9/19/2013

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