

PMC-EF2a

(2.0+02)

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

**RECIPIENT:**Northwest Energy Innovations**STATE:** OR

PROJECT TITLE : WAVE ENERGY TECHNOLOGY-NEW ZEALAND MULTI-MODE WAVE ENERGY CONVERTER ADVANCEMENT PROJECT

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000293	DE-EE0003642	GFO-0003642-002	GO3642

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:

Rational for determination:

EA Category: DOE/EA 1917 and DOE Mitigated FONSI signed 8-15-2012

This determination is being made for tasks 2.12 – 2.14 (formally 2.2 of the old SOPO) for Northwest Energy Innovation's (NWEI) WET-NZ Multi-Mode Wave Energy Converter Advancement Project. The original SOPO used for the previous NEPA determination was revised to include more detail of project activities; however, the scope of the work has not been changed. This determination will utilize the current SOPO for this project.

The remaining project activities (tasks 1.0, 2.1-2.11, 2.15, 3.0, 4.0) were previously evaluated on 3/30/2011 and determined to qualify for DOE categorical exclusions A9 (Information gathering) and B3.6 (bench-scale research projects and conventional laboratory operations).

Tasks 2.12-2.14 of NWEI's project involves conducting a controlled open sea deployment and 6-8 week test of a ½ scale (1:2) experimental Wave Energy Converter (WEC) device at the Oregon State University (OSU) Northwest National Marine Renewable Energy Center's (NNMREC) Wave Energy Test site off the coast of Newport, Oregon.

The objective NWEI's proposed project is to advance the current WET-NZ design by collecting environmental, technical, and energy resource information during the open ocean testing period. The project would be located within the OSU 1-square-nautical-mile area (OSU Wave Energy Test site) in the Pacific Ocean, approximately two miles off the coast of Oregon. Primary project components being deployed include a ½ scale WET-NZ wave energy conversion device, OSU's Ocean Sentinel Instrumentation Buoy, a Power and Communications Cable, a TRIAXYS Wave Measurement Buoy, and associated mooring systems. The proposed project will not be connected to the electric grid.

Impacts related to NWEI WET-NZ project components and the testing activities at the OSU test site were evaluated in DOE/EA 1917 and were found to be less than significant. A DOE Mitigated FONSI for the OSU project, including the first test of the WET-NZ, was signed on August 15, 2012. NWEI and OSU were also responsible for getting a U.S Army Corps permit.

The following permits/approvals are necessary for deployment activities:

* U.S. Army Corps of Engineers - Nationwide Permit #5 for authorization under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act (received on August 9, 2012)

* Oregon Department of State Lands - Temporary Use Authorization (received on Aug. 8, 2012)

* Oregon Department of Land Conservation and Development - Federal Consistency Certification pursuant to the federal Coastal Zone Management Act (received on Aug. 9, 2012)

* United States Coast Guard - Private Aids to Navigation (received on Aug. 13, 2012)

The US Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) were consulted per Sec. 7 requirements of the Endangered Species Act. The USFWS determined that the project was "unlikely to adversely affect" marine avian species under their jurisdiction. The NMFS issues a Biological Opinion that concluded that some marine species under their jurisdiction may be affected by the project. With the established OSU Adaptive Management Framework and NWEI Adaptive Mitigation Plan in place, the likelihood of impacts was found to be less than significant and a Mitigated FONSI was signed on August 15, 2012.

Based on the findings of the DOE/EA 1917, which included an analysis of potential impacts from the deployment of the WET-NZ and OSU Ocean Sentinel, DOE has determined that there would be no significant impacts associated with allowing expenditure of federal funding by NWEI for the deployment and testing (sub-tasks 2.12-14) of their WET-NZ project. The Mitigated FONSI is applicable to this project and further analysis or an EIS is not needed.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Insert the following language in the award:

You are required to:

Northwest Energy Innovations, LLC (NWEI) is required to comply with all Applicant Committed Measures set forth in the DOE/EA 1917 specific to their testing actions; with the Terms and Conditions referenced in the U.S. Army Corps Nationwide #5 Permit; with the WET-NZ/Ocean Sentinel Adaptive Mitigation Plan and all environmental thresholds discussed therein. These include, but are not limited to:

1. NWEI shall notify the U.S. Army Corps with the date the activities authorized in waters of the United States are scheduled to begin.
2. NWEI shall immediately notify the U.S. Army Corps and the DOE if at any time during the authorized work, human remains and/or cultural resources are discovered within the permit area.
3. NWEI shall fully implement all Reasonable and Prudent measures and Terms and Conditions (pages 128-129) listed in the National Marine Fisheries Service's Biological Opinion number F/NWR/2012/02531 dated August 2, 2012.
4. NWEI shall implement and adhere to the thresholds and measures therein for the Adaptive Management Framework and the Ocean Sentinel/WET-NZ Mitigation Plan in order to be in compliance with the Endangered Species Act and the National Marine Fisheries Service's Biological Opinion number F/NWR/2012/02531 dated August 2, 2012.
5. NWEI shall notify the U.S. Army Corps and the DOE if the project changes in scope or is otherwise modified. The U.S. Army Corps and DOE are required, per the NMFS Biological Opinion, to reinstate consultation on this action where discretionary Federal involvement or control over the action has been retained or is authorized by law and (a) the amount or extent of taking specified in the Incidental Take Statement is exceeded, (b) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered, (c) the identified action is subsequently modified in a manner that has an effect to the listed species or critical habitat not considered in the Biological Opinion, (d) a new species is listed or critical habitat designated that may be affected by the approved action.
6. NWEI shall ensure that all buoy installation and placement of anchor fill in the ocean will take place during the summer season during calm waters when there are no storm conditions to minimize potential aquatic impacts such as collisions and spills during rough seas.
7. NWEI shall implement the Ocean Sentinel/WET-NZ Adaptive Mitigation Plan for the wave energy testing/project.

- 8. NWEI shall comply with all Terms as listed 1 – 24 in the Department of State Lands Temporary Use Permit.
- 9. NWEI shall comply with all terms set forth in the U.S. Coast Guard Private Aids to Navigation Permit.
- 10. NWEI shall comply with all Applicant Committed Measures as described in Chapter 2 of the DOE/EA 1917.

Note to Specialist :

Please insert the above NEPA provisions #1-10 into the Terms and Conditions of Northwest Energy Innovations award.

Review completed by Laura Margason on August 20, 2012

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____
Electronically Signed By: Lori Gray *Lori Gray* Date: 8/20/2012
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