

PMC-ND  
(1.08.09.13)

# U.S. DEPARTMENT OF ENERGY

## OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY

### NEPA DETERMINATION



RECIPIENT: University of Hawaii Sytems/Attn: YAA-YIN FONG

STATE: HI

PROJECT  
TITLE : HAWAII NATIONAL RENEWABLE MARINE ENERGY CENTER

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
	DE-FG36-08GO18180	GFO-GO18180-007	

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:

**B5.25 Small-scale renewable energy research and development and pilot projects in aquatic environments** Small-scale renewable energy research and development projects and small-scale pilot projects located in aquatic environments. Activities would be in accordance with, where applicable, an approved spill prevention, control, and response plan, and would incorporate appropriate control technologies and best management practices. Covered actions would not occur (1) within areas of hazardous natural bottom conditions or (2) within the boundary of an established marine sanctuary or wildlife refuge, a governmentally proposed marine sanctuary or wildlife refuge, or a governmentally recognized area of high biological sensitivity, unless authorized by the agency responsible for such refuge, sanctuary, or area (or after consultation with the responsible agency, if no authorization is required). If the proposed activities would occur outside such refuge, sanctuary, or area and if the activities would have the potential to cause impacts within such refuge, sanctuary, or area, then the responsible agency shall be consulted in order to determine whether authorization is required and whether such activities would have the potential to cause significant impacts on such refuge, sanctuary, or area. Areas of high biological sensitivity include, but are not limited to, areas of known ecological importance, whale and marine mammal mating and calving/pupping areas, and fish and invertebrate spawning and nursery areas recognized as being limited or unique and vulnerable to perturbation; these areas can occur in bays, estuaries, near shore, and far offshore, and may vary seasonally. No permanent facilities or devices would be constructed or installed. Covered actions do not include drilling of resource exploration or extraction wells, use of large-scale vibratory coring techniques, or seismic activities other than passive techniques.

## Rationale for determination:

DOE is proposing to fund the University of Hawaii (HINMREC) to conduct marine environmental baseline studies at the Wave Energy Technology (WET) testing site owned by the U.S. Navy, Marine Corps Base Hawaii in Oahu, Hawaii.

A previous NEPA review was completed on this project that analyzed the impacts of conducting similar environmental data collection studies activities for the shallower 30-meter Naval WET site. This review is being completed for activities proposed at the deep water sites, as listed in Task 4.0 of the current SOPO. Task 4.0 activities at the Navy's deep-water site were conditioned pending the completion of the Naval Facilities Engineering Command's (NAVFAC, Pacific Region) Wave Energy Test Site Final Environmental Assessment (EA, 2014) and completion of the Endangered Species Act consultation requirements. The NAVFAC considered the HINMREC environmental studies, being done with DOE funding, as a connected action to the operation of the Naval WET test sight, and therefore included DOE's action to fund the activities into their EA.

## Proposed Project:

HINMREC scientific monitoring devices would be placed in marine waters at WET testing site located in Kaneohe bay adjacent to the Marine Corps Base Hawaii (MCBH). The devices would be deployed in 50- and 70-meter deep water test sites.

The data gathering devices include: three (3) wave measuring "Waverider" buoys in the vicinity of the deep-water WETS, probes to measure the electromagnetic field (EMF) signature of the undersea power cables, acoustic monitoring stations to measure sound levels from the WEC devices, and an active Acoustic Doppler Current Profiler to record ocean current and wave conditions. Acoustic monitoring devices would utilize passive recording methods; however the ADCP would utilize active recording methods and emit sound bursts into the water to calculate wave and current data.

Aside from the ADCP and Waverider buoys, all equipment would be grouped onto platforms to become localized



monitoring stations. These monitoring stations would be deployed from a small boat-mounted crane by one or two people. The monitoring stations would require deployment of subsurface buoys (approximately 10 in in diameter) to facilitate retrieval. The subsurface buoys would be deployed approximately 98 ft. below sea level. The stations would be operational for approximately two years, with fieldwork beginning in 2014.

All proposed devices would be removed by the completion of the WETS testing period. After removal, the scientific data gathering equipment would be reused for other projects or appropriately disposed of in compliance with relevant Federal and state regulations.

Device specifications and additional deployment descriptions have been detailed in Chapter 2.2.2.6 (pgs. 2-14 to 2-17) in the NAVFAC Wave Energy Test Site Final Environmental Assessment (2014).

#### Consultations:

NAVFAC initiated informal ESA Section 7 consultation with the National Marine Fisheries Service (NMFS) per requirements of Section 7 of the Endangered Species Act (ESA) on June 6th, 2013. NAVFAC subsequently submitted a revised ESA consultation package and request for concurrence by NMFS (November 21st and 22nd, 2013, respectively). The NAVFAC determined that the Proposed Action may affect, but is not likely to adversely affect any species listed or proposed as federally threatened or endangered, or their designated or proposed critical habitat. On December 4th, 2013, NMFS submitted a letter of concurrence on this ESA determination.

On June 6th, 2013, the NAVFAC conducted informal consultation on Essential Fish Habitat (EFH) with the NMFS. They determined that the Proposed Action may adversely affect EFH. However, the impacts would be minimal and insignificant with the implementation of best management practices (BMPs) recommended by NMFS and accepted and agreed to by the NAVFAC (see Appendix D of the 2014 NAVFAC EA for copies of this correspondence).

The lands adjacent to the project site contain two historic properties: Mokapu Burial Area is listed on the National Register of Historic Places and Building 614 on the U.S. Navy Hawaii Marine Corps Base is eligible for NRHP listing. NAVFAC determined that the Proposed Action would result in no adverse effects to historic properties and consulted with State Historic Preservation Officer (SHPO) under Section 106 of the National Historic Preservation Act (NHPA). SHPO did not object to this determination within the 30-day period following receipt of the NAVFAC consultation letter dated March 29th, 2013 and per the NHPA, the SHPO's concurrence is assumed. The State Office of Hawaiian Affairs concurred with this determination by electronic mail on December 19th, 2013 (see Appendix B of the 2014 NAVFAC EA for copies of this correspondence).

#### Applicant Committed Measures:

In order to support NAVFAC's ESA findings and NEPA determination, HINMREC agrees to comply with the following measures in order to minimize potential impacts to marine resources:

\*HINMREC will adhere to all proposed Best Management Procedures mitigation measures as outlines in the NAVFAC Wave Energy Test Site Final Environmental Assessment (2014).

\* HINMREC will follow the National Marine Fisheries Service's 2013 "Best Management Practices (BMPs) for General In- and Near-Water Work Including Boat and Diver Operations".

\* HINMREC will ensure that vessel operators comply with the National Marine Fisheries Service's current recommended BMPs that include measures intended to prevent the introduction of wastes and toxicants into the marine environment.

\* HINMREC will ensure that all equipment and mounting hardware is removed after the designated 2-year time frame or upon completion of each Wave Energy device test.

\* HINMREC and/or their subcontractors would adhere to the "Diving Safety Manual University of Hawai'i System," dated August 2008, that includes revisions and improvements embodied in the current AAUS Guidelines for Conduct of Scientific Diving Programs and Certification of Scientific Divers.

\* Sites for anchoring and installation of structures on bottom should be selected to avoid injury/damage to live coral in the project area. The anchors, the cable, the crate and the grate should not be placed on top of, nor where possible immediately adjacent to, coral colonies of any species.

\* HINMREC will ensure that all contractors involved in the deployment activities, be familiar with and ensure that each of the BMPs as proposed are successfully implemented, and monitored for effectiveness throughout the duration of the project.

\* HINMREC will acquire a US Coast Guard Private Aids to Navigation Permit, as necessary, for deployed



instrumentation affecting navigable waters.

#### Impact Analysis:

The NAVFAC Wave Energy Test Site Final Environmental Assessment (2014) found that the Proposed Action, which included HINMREC's portion, would not result in significant direct, indirect, or cumulative impacts to the following resources: climate, air quality, geology, soils, shoreline geomorphology, oceanographic conditions, water quality, natural hazards, marine biological resources, terrestrial biological resources, land and water use compatibility, cultural resources, recreation, infrastructure, public safety and visual resources.

In addition, the WET site and the project activities would not occur within areas of hazardous natural bottom conditions or within the boundary of an established marine sanctuary or wildlife refuge, a governmentally proposed marine sanctuary or wildlife refuge, or a governmentally recognized area of high biological sensitivity.

Based on the above information, NAVFAC's "Findings of No Significant Impact" from their Wave Energy Test Site Final Environmental Assessment (2014), and consultations with NMFS and the SHPO, DOE has determined that this project is consistent with actions covered under DOE CX B5.25; and therefore is 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:

Comply with the National Marine Fisheries Service's Best Management Practices (BMPs), as discussed above.

Comply with the Applicant Committed Measures described (above) in the DOE NEPA Determination (GFO-18180-007).

Note to Specialist :

NEPA review completed by Laura Margason on May 27, 2014.

This determination will require a tailored provision (please utilize the information above under "You are required:" and "Applicant committed measures" in the above determination to assist in the development of the provisional language).

NEPA Provisions from NEPA review # GFO-GO18180-006 still apply to this award as these activities have not occurred yet. No further NEPA holds on specific tasks should apply to this award.

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

NEPA Compliance Officer Signature:

Electronically  
Signed By:

Kristin Kerwin

NEPA Compliance Officer

Date:

5/29/2014

#### 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 :