

PMC-ND  
(1.08.09.13)

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



**RECIPIENT:**NREL

**STATE:** CA

**PROJECT TITLE :** Model Validation and Site Characterization for Early Deployment Marine Hydrokinetic (MHK) Sites and Establishment of Wave Classification Scheme – Wave Instrumentation Deployment - Fort Bragg, CA; NEPA Tracking No. 17-005

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
	DE-AC36-08GO28308	NREL-17-005	GO28308

**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:

**B3.16 Research activities in aquatic environments** Small-scale, temporary surveying, site characterization, and research activities in aquatic environments, limited to: (a) Acquisition of rights-of-way, easements, and temporary use permits; (b) Installation, operation, and removal of passive scientific measurement devices, including, but not limited to, antennae, tide gauges, flow testing equipment for existing wells, weighted hydrophones, salinity measurement devices, and water quality measurement devices; (c) Natural resource inventories, data and sample collection, environmental monitoring, and basic and applied research, excluding (1) large-scale vibratory coring techniques and (2) seismic activities other than passive techniques; and (d) Surveying and mapping. These activities would be conducted in accordance with, where applicable, an approved spill prevention, control, and response plan and would incorporate appropriate control technologies and best management practices. None of the activities listed above would occur 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.

**Rationale for determination:**

The U.S. Department of Energy (DOE) is proposing to provide funding to the National Renewable Energy Laboratory (NREL) to collect wave resource data using a buoy at a potential wave energy site off the coast of Fort Bragg, California, for up to a two year period.

An experienced subcontractor has been selected for the proposed project. Proposed activities would include project management and data analysis for the subcontractor to develop a deployment and retrieval plan, and to obtain necessary permits and approvals for the deployment and recovery of the buoy.

The proposed location for buoy deployment would be offshore of Fort Bragg, California (approximate location: 39.37N, 123.91W). The water depth is approximately 125 meters at this location.

A Datawell Directional Waverider MKIII would be deployed to collect wave resource data related to wave power density and extreme sea states. The buoy would be retrieved after twelve months of high-quality data are collected. The spherical buoy is approximately 1 meter in diameter, with half the buoy above water and half below water. The buoy would be anchored to the ocean floor using an anchor system which has a footprint of less than 0.5 square meters. The anchor and mooring system consists of rubber cord, shackles, several floats, sinkers, and scrap chain and would either utilize a slack mooring line configuration or a taught configuration.

Buoy deployment actions are not authorized until additional information regarding deployment methods and site specific environmental information is provided by NREL and/or its subcontractor to DOE and DOE completes the required consultations, including the Endangered Species Act consultation. The information required for DOE to

complete the consultations is not available at this time. It will be available to DOE after NREL's subcontractor develops the deployment and retrieval plan.

Based on the review of the proposal, DOE has determined the proposal fits within the class of action and the integral elements of 10 CFR 1021 subpart B outlined in the DOE categorical exclusion selected above. DOE has also determined that: (1) there are no extraordinary circumstances (as defined by 10 CFR 1021.410(2)) related to the proposal that may affect the significance of the environmental effects of the proposal; (2) the proposal has not been segmented to meet the definition of a categorical exclusion; and (3) the proposal is not connected to other actions with potentially significant impacts, related to other proposals with cumulatively significant actions, or an improper interim action. This proposal is categorically excluded from further NEPA review.

**NEPA PROVISION**

Insert the following language in the award:

You are required to:

Buoy deployment actions are not authorized until additional information regarding deployment methods and site specific environmental information is provided by NREL and/or its subcontractor to DOE and DOE completes the required consultations, including the Endangered Species Act consultation.

Note to Specialist :

NREL

Prepared by Nicole Serio, March 9, 2017

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

NEPA Compliance Officer Signature:  Date: 3/9/2017  
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