

PMC-ND
(1.08.09.13)

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



RECIPIENT: NREL

STATE: ME

PROJECT TITLE : Model Validation and Site Characterization for Early Deployment Marine Hydrokinetic (MHK) Sites and Establishment of Wave Classification Scheme – Tidal Instrumentation Deployment; NREL Tracking No. 16-018

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-AC36-08GO28308	NREL-16-018	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 tidal resource data using two acoustic Doppler current profilers (ADCPs) and one acoustic Doppler velocimeter (ADV) at a potential tidal energy site off the coast of Eastport, Maine for up to a four month period. Proposed activities would include: data analysis, project management and contract actions for an experienced subcontractor to: develop an ADCP and ADV deployment plan, and obtain necessary permits and approvals for deployment and recovery of the ADCPs and ADV.

The location for ADCP and ADV deployment would be offshore of Eastport, Maine (approximate location: 44.933N, 67.004"W). The ocean bottom is approximately 40 meters in depth at this location. While there is no existing equipment or infrastructure at that location currently, similar permits and instrumentation have been installed by NREL in this same area in previous years.

Two ADCP sensors would be deployed at the Eastport, ME location for tidal resource measurements. The sensor uses five acoustic beams to determine changes in current. The acoustic frequencies would be between 500 kHz and 1 MHz. The ADCP sensor would be mounted on a platform and lowered to the ocean floor. The platform would measure approximately 58" in length, 58" in width, and 21" in height and is expected to weigh approximately 150 lbs. in water with ballast.

One ADV sensor would be deployed at the Eastport, ME location for tidal turbulence measurements. The sensor emits a high frequency pitch and processes small volumes of water to measure water velocity. The spherical buoy would measure approximately 1 meter in diameter, with half the buoy above water and half below water. The sensor 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 would consist of 1/2" Amsteel line, 1/2" galvanized chain, steel shackles, and an acoustically triggered release, and would utilize a taught mooring line configuration.

ADCP and ADV deployments are not authorized until additional information regarding deployment methods and site specific environmental information is provided by NREL and/or its subcontractor to DOE for additional NEPA review and completion of required consultations by DOE, including the Endangered Species Act consultation. The required information is not available until NREL contracts with a subcontractor and the subcontractor develops the deployment 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

DOE has made a final NEPA determination for this award

Insert the following language in the award:

If the Recipient intends to make changes to the scope or objective of this project, the Recipient is required to contact the Project Officer, identified in Block 15 of the Assistance Agreement before proceeding. The Recipient must receive notification of approval from the DOE Contracting Officer prior to commencing with work beyond that currently approved. If the Recipient moves forward with activities that are not authorized for Federal funding by the DOE Contracting Officer in advance of a final NEPA decision, the Recipient is doing so at risk of not receiving Federal funding and such costs may not be recognized as allowable cost share.

Insert the following language in the award:

You are required to:

ADCP and ADV deployments are not authorized until additional information regarding deployment methods and site specific environmental information is provided by NREL and/or its subcontractor to DOE for additional NEPA review and completion of required consultations by DOE, including the Endangered Species Act consultation.

Note to Specialist :

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NREL
Prepared by Nicole Serio July 25, 2016

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:  Lori Gray / *Lori Gray* Date: 7/25/2016
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