PMC-ND

(1.08.09.13)

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



STATE: MA

RECIPIENT: Woods Hole Oceanographic Institution

PROJECT TITLE:

A Combined Electric/Magnetic Field Instrument for MHK Environmental Monitoring

Funding Opportunity Announcement Number Procurement Instrument Number NEPA Control Number CID Number DE-FOA-0001418 DE-EE0007825 GFO-0007825-003 GO7825

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Policy 451.1), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:

Description:

A9 Information gathering,

Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information analysis, and dissemination (including, but not limited to, document publication and distribution, and classroom training and dissemination informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)

B3.16 Research activities in aquatic

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 environments 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 Woods Hole Oceanographic Institute (Woods Hole) to develop and field test a combined electric/magnetic field instrument (EMF) for use in and around marine hydrokinetic sites.

The proposed project would be divided into three Budget Periods, with a Go/No Go decision point between each Budget Period. DOE previously completed two NEPA reviews [Budget Period 1 (BP1 - Tasks 1-5) (GFO-0007825-001 CX A9 and B3.16, 12/06/2016) and Budget Period 2 (BP2 – Tasks 6-9) (GFO-0007825-002 CX A9 and B3.16, 1/18/2018)]. In BP1, Woods Hole designed, fabricated, lab tested, and field tested the EMF instruments at the Pacific Northwest National Lab (PNNL), in Sequim Bay. In BP2, Woods Hole modified the EMF instruments and again tested them at PNNL. This NEPA review is for BP3 (Tasks 10-11). BP3 would include analyzing results from the BP2 field testing, making design modifications based on those results, and then re-fabricating the EMF device

based on those modifications. These tasks would occur at the Woods Hole Oceanographic Institute, Blake Building, an office and laboratory building on the Woods Hole Campus. Once modified, the device would be field tested at the Wave Energy Test Site (WETS) near Marine Corps Base Hawaii, Kaneohe Bay, Hawaii.

The device to be tested would consist of a 17 inch housing that would contain EMF measurement instrumentation. The device would passively measure EMF fields. The device would be deployed in Kaneohe Bay, adjacent to an active WETS test site, by releasing it from a small vessel and allowing it to free fall to the seafloor, measuring EMF within the water column. In addition, a magnetometer would be towed within the water column behind the research vessel.

In March of 2019, Department of Navy (Navy), as lead agency, in conjunction with DOE (EERE, as well as PNNL) (jointly, the Federal partners) completed a Biological Assessment (BA) to evaluate potential impacts to Endangered Species Act listed species (T&E species) and Essential Fish Habitat Assessment (EFH) from six environmental study projects to be deployed at WETS, including this proposed project. The BA and EFH determined that the proposed projects, as a whole, would Not Likely Adversely Affect T&E species and may adversely affect EFH, but those effects would be minimal and temporary. On April 4, 2019, the Federal partners engaged in informal consultation with the National Marine Fisheries Service (NMFS). On May 2, 2019, NMFS concurred with the determinations of the Federal partners.

NEPA PROVISION

DOE has made a final NEPA determination.

Include the following condition in the financial assissance agreement:

Any work proposed to be conducted at a federal facility may be subject to additional NEPA review by the cognizant federal official and must meet the applicable health and safety requirements of the facility.

Notes:

Water Power Program

This NEPA determination does require a tailored NEPA provision. Include the federal facility language (above) in the NEPA provision.

NEPA review completed by Roak Parker 7.2.19

FOR CATEGORICAL EXCLUSION DETERMINATIONS

The proposed action (or the part of the proposal defined in the Rationale above) fits within a class of actions that is listed in Appendix A or B to 10 CFR Part 1021, Subpart D. To fit within the classes of actions listed in 10 CFR Part 1021, Subpart D, Appendix B, a proposal must be one that would not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities; (3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources, including, but not limited to, those listed in paragraph B(4) of 10 CFR Part 1021, Subpart D, Appendix B; (5) involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those listed in paragraph B(5) of 10 CFR Part 1021, Subpart D, Appendix B.

There are no extraordinary circumstances related to the proposed action that may affect the significance of the environmental effects of the proposal.

The proposed action has not been segmented to meet the definition of a categorical exclusion. This proposal is not connected to other actions with potentially significant impacts (40 CFR 1508.25(a)(1)), is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)), and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 concerning limitations on actions during preparation of an environmental impact statement.

The proposed action is categorically excluded from further NEPA review.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:		Sened By: Kristin Kerwin	Date:	7/9/2019	
		NEPA Compliance Officer			
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~	Field Office Manager review not required Field Office Manager review required				
BA	SED ON MY REVIEW I CONCUR WITH	H THE DETERMINATION OF THE NCO	:		
Field Office Manager's Signature:			Date:		
		Field Office Manager			