

PMC-EF2a

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



(2.04.02)

RECIPIENT: University of Massachusetts Dartmouth

STATE: MA

PROJECT TITLE : Marine Renewable Energy Center

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
CDP	DE-EE0000299 Renewal	GFO-10-028-001	MA4

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:

- A9** Information gathering (including, but not limited to, literature surveys, inventories, audits), data analysis (including computer modeling), document preparation (such as conceptual design or feasibility studies, analytical energy supply and demand studies), and dissemination (including, but not limited to, document mailings, publication, and distribution; and classroom training and informational programs), but not including site characterization or environmental monitoring.
- B3.1** Onsite and offsite site characterization and environmental monitoring, including siting, construction (or modification), operation, and dismantlement or closing (abandonment) of characterization and monitoring devices and siting, construction, and associated operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis. Activities covered include, but are not limited to, site characterization and environmental monitoring under CERCLA and RCRA. Specific activities include, but are not limited to:
- B3.3** Field and laboratory research, inventory, and information collection activities that are directly related to the conservation of fish or wildlife resources and that involve only negligible habitat destruction or population reduction
- B3.6** Siting, construction (or modification), operation, and decommissioning of facilities for indoor bench-scale research projects and conventional laboratory operations (for example, preparation of chemical standards and sample analysis); small-scale research and development projects; and small-scale pilot projects (generally less than two years) conducted to verify a concept before demonstration actions. Construction (or modification) will be within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible).

Rational for determination:

The Marine Renewable Energy Center comprises of University of Massachusetts Dartmouth, Massachusetts Institute of Technology, Woods Hole Oceanographic Institution, University of Rhode Island, and the University of New Hampshire. The Marine Renewable Energy Center proposes to use federal funds to continue research efforts outlined in the previous year's CDP of demonstrating the feasibility in developing marine renewable energy. New activities will also take place in continued support of the previous year's CDP's goals.

Project activities will include test site assessments of the Muskeget Channel to determine background noise levels and determination of zooplankton injury and mortality on an existing structure. NOREIZ offshore wind assessment will analyze offshore wind deployment technologies and their environmental impact and current economic costs. Muskeget tidal test site study will study the baseline physical and biological on the channel, evaluate deployment methods, and conclude with recommendations. This project will also involve high potential research to accelerate development for wave action on piers using attenuators and use of summer fellowship to utilize graduate students for paid research. As a final product of this project, project management and public outreach will be utilized for stakeholder input industry partnership.

This will involve the use of hydrophones to record noise in various locations at multiple water depths. This information will be used to assess potential issues resulting from operating tidal devices.

This study would position standard plankton nets upstream and downstream of an operational pilot permit tidal turbine. They do not propose to send animals through the turbine, rather observe the effect of an existing structure on zooplankton community.

National Marine Fisheries Service was contacted by the University of Massachusetts of Dartmouth in regards to the zooplankton collection study their response of not likely to affect is as follows "Upon review of the zooplankton sampling plan, interactions/effects on listed species are extremely unlikely to occur."

This project does not generate air emissions or hazardous waste within the defined scope of work. Each university has designed protocols for safety in place, monitored by each university's Environmental Health and Safety Office. The applicant has submitted an R & D questionnaire which thoroughly addresses chemical and safety handling protocols.

This project comprises of information gathering, offsite characterization and environmental monitoring, and conventional bench scale indoor and outdoor research activities for small scale pilot programs and information dissemination. Additional activities involve the research for zooplankton mortality. For these activities a CX A9, B3.1, B3.6 & B3.3 will apply.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

Eugene Brown 7/20/2010

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:


NEPA Compliance Officer

Date:

8/3/10

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:

Field Office Manager

Date:

Date