

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



RECIPIENT: University of New Hampshire

STATE: NH

PROJECT TITLE : An Atlantic Marine Energy Center (AMEC) for Advancing the Marine Renewable Energy Industry and Powering the Blue Economy

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0002234	DE-EE0009450	GFO-0009450-003	GO9450

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, analysis, and dissemination 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 dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)

B3.6 Small-scale research and development, laboratory operations, and pilot projects Siting, construction, modification, operation, and decommissioning of facilities for smallscale research and development projects; conventional laboratory operations (such as preparation of chemical standards and sample analysis); and small-scale pilot projects (generally less than 2 years) frequently conducted to verify a concept before demonstration actions, provided that construction or modification would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Not included in this category are demonstration actions, meaning actions that are undertaken at a scale to show whether a technology would be viable on a larger scale and suitable for commercial deployment.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide funding to the University of New Hampshire (UNH) to lead consortium which would include UNH, Stony Brook University (SBU), Lehigh University (LU), and the Coastal Studies Institute (CSI; administered by East Carolina University) to establish the Atlantic Marine Energy Center (AMEC). In addition to establishing AMEC organizational structure, participants, and research capabilities, award activities would include laboratory and field research.

DOE previously completed two NEPA Determinations (NDs) (GFO-0009450-001, 8/20/2021: A9, A11, B3.6, B5.15; GFO-0009450-002, 3/14/2022: A9, B3.6) which did not apply to Subtasks 4.2, 4.9, 9.4, 9.5, and all Budget Period (BP) 2 tasks. Additional information has been submitted for review since that time. This NEPA review is only for Subtask 4.9.

Task 4 activities include laboratory research activities and upgrades to existing facilities. Subtasks that are not part of this review or a previous ND are still restricted at this time. Additional information and NEPA review is still required for restricted tasks and subtasks.

Subtask 4.9 would involve the installation of a mobile “Green Energy Hub” testbed at Jennette’s Pier (Nags Head, NC), a public fishing pier managed by North Carolina Aquariums. The testbed would be installed by CSI in the small “Test Hut” building located at the seaward end of the pier. The testbed would include a power converter microgrid unit with five rechargeable batteries which would permit users to monitor and manage power produced by marine energy (ME) devices.

While it is anticipated that the testbed would be used for future ME device testing at Jennette’s Pier, this subtask would not involve any activities involving the connection, handling, or operation of ME devices. Such activities, if federally funded, would require additional NEPA review. The testbed is a preexisting prototype developed by FREEDM Systems Center (North Carolina State University).

While Jenette's Pier is a location for public recreation, the Test Hut is a preexisting purpose-built building for the type of work to be conducted for this award. Facility modifications would not be required for any structure at Jenette's Pier to install the testbed. Award activities would involve the handling and use of electrical components and equipment. While there would be inherent deep-water hazards (e.g. drowning) for personnel while on the pier, these risks are considered minimal as all installation activities would happen at the Test Hut on the pier. Existing university and government health, safety, and environmental policies and procedures would be followed at all facilities, including: personnel training, proper personal protective equipment (PPE), engineering controls, monitoring, and internal assessments.

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.

NEPA PROVISION

DOE has made a conditional NEPA determination.

The NEPA Determination applies to the following Topic Areas, Budget Periods, and/or tasks:

[Subtask 4.9](#)

The NEPA Determination does not apply to the following Topic Area, Budget Periods, and/or tasks:

[Subtask 4.2](#)

[Subtask 9.4](#)

[Subtask 9.5](#)

[Budget Period 2](#)

Notes:

[Water Power Technologies Office \(WPTO\)](#)
[NEPA review completed by Dan Cahill, 3/14/2022.](#)

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.

A portion of the proposed action is categorically excluded from further NEPA review. The NEPA Provision identifies Topic Areas, Budget Periods, tasks, and/or subtasks that are subject to additional NEPA review.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____

 Electronically Signed By: **Kristin Kerwin**

NEPA Compliance Officer

Date: 3/21/2022

FIELD OFFICE MANAGER DETERMINATION

- Field Office Manager review not required
- Field Office Manager review required

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____

Field Office Manager

Date: _____