

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



**RECIPIENT:** University of New Hampshire

**STATE:** AL

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

|  |                                      |                            |                   |
|--|--------------------------------------|----------------------------|-------------------|
| <b>Funding Opportunity Announcement Number</b> | <b>Procurement Instrument Number</b> | <b>NEPA Control Number</b> | <b>CID Number</b> |
| DE-FOA-0002234                                 | DE-EE0009450                         | GFO-0009450-005            | 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:

- |   |  |
|---|--|
| <b>A9 Information gathering, analysis, and dissemination</b>                                | 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.)   |
| <b>B1.31 Installation or relocation of machinery and equipment</b>                          | Installation or relocation and operation of machinery and equipment (including, but not limited to, laboratory equipment, electronic hardware, manufacturing machinery, maintenance equipment, and health and safety equipment), provided that uses of the installed or relocated items are consistent with the general missions of the receiving structure. Covered actions include modifications to an existing building, within or contiguous to a previously disturbed or developed area, that are necessary for equipment installation and relocation. Such modifications would not appreciably increase the footprint or height of the existing building or have the potential to cause significant changes to the type and magnitude of environmental impacts.  |
| <b>B3.6 Small-scale research and development, laboratory operations, and pilot projects</b> | 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.   |
| <b>B3.16 Research activities in aquatic environments</b>                                    | 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 University of New Hampshire (UNH) to lead a 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 four NEPA Determinations (NDs) (GFO-0009450-001, 08/20/2021: A9, A11, B3.6, B5.15; GFO-0009450-002, 03/03/2022: A9, B3.6; GFO-0009450-003, 03/14/2022: A9, B3.6; GFO-0009450-004, 07/21/2022: A9, B3.6, B5.25) which did not apply to Subtasks 4.2 and Budget Period (BP) 2 activities. This ND applies only to Subtask 4.2. DOE will complete the NEPA review for BP2 activities when sufficient information is available to conduct a meaningful review.

Proposed activities for Subtask 4.2 would include instrumentation and data acquisition system upgrades for the Turbine Deployment Platform (TDP) at the UNH Tidal Energy Test Site at Memorial Bridge in Portsmouth, NH. The project site is an existing open-water test facility. The proposed upgrades would address identified data collection gaps and provide improved compatibility with the NREL Modular Ocean Data Acquisition (MODAQ) efforts. An imaging sonar would also be acquired to provide enhanced marine wildlife monitoring capabilities. The proposed work activities would involve transport of personnel and equipment via boat to and from the project site.

In addition to the instrumentation upgrades that would occur at the UNH Tidal Energy Test Site, staging activities (e.g., transfer of personnel and equipment between land and boat) would occur at the UNH Judd Gregg Marine Research Center Pier and laboratory work and preparation of instrumentation would occur at the UNH Chase Ocean Engineering Laboratory.

All UNH facilities are purpose-built for the type of work to be conducted for this award. Aside from the proposed instrumentation upgrades at the UNH Tidal Energy Test Site, facility modifications would not be required. No new permits would be required for the proposed activities.

Award activities would involve typical hazards associated with engineering laboratories and an open water environment, including handling of tools, laboratory equipment, collisions associated with a water vessel, slipping, falling, drowning, and traumatic injury associated with operation and handling of heavy equipment and materials. Existing UNH Environmental, Health, and Safety policies and procedures would be followed at all facilities.

DOE completed informal consultation with the National Marine Fisheries Service (NMFS) per Section 7 of the Endangered Species Act (ESA) to determine potential impacts of the proposed project activities on federally listed species (Kemp's Ridley Turtle, Leatherback Turtle, Loggerhead Turtle, Green Turtle, Atlantic Sturgeon, Shortnose Sturgeon) and critical habitats (Atlantic Sturgeon) under NMFS jurisdiction. DOE received a letter from NMFS on 03/06/2024 stating they concurred that the proposed action is not likely to adversely affect (NLAA) any NMFS ESA-listed species or designated critical habitat. DOE determined that the proposed project activities would have no effect on ESA-listed species under U.S. Fish & Wildlife jurisdiction (Northern Long-eared Bat, Red Knot, Roseate Tern) given the nature of the proposed activities. In addition, since none of the proposed activities would result in the physical disruption of bottom sediments or associated features, DOE determined that there would be no effect on Essential Fish Habitat.

DOE has considered potential impacts on resources, including those of an ecological, historical, cultural, and socioeconomic nature. DOE does not anticipate adverse impacts on these resources.

## **NEPA PROVISION**

DOE has made a conditional NEPA determination.

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

**Subtask 4.2**

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

**Budget Period 2**

Notes:

Water Power Technologies Office (WPTO)  
NEPA review completed by Melissa Parker, 03/12/24

**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:  Andrew Montano Date: 3/12/2024  
NEPA Compliance Officer

**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: \_\_\_\_\_ Date: \_\_\_\_\_  
Field Office Manager