PMC-ND (1.08.09.13)

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



RECIPIENT: Pacific Ocean Energy Trust

PROJECT TITLE:

Network Director for the TEAMER Program

Funding Opportunity Announcement Number DE-FOA-0002012

Procurement Instrument Number DE-EE0008895

NEPA Control Number CID Number GFO-0008895-002

STATE: OR

GO8895

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

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 dissemination informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)

B3.6 Smallscale 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.

B5.15 Smallscale renewable energy research and development and pilot projects

Small-scale renewable energy research and development projects and small-scale pilot projects, provided that the projects are located within a previously disturbed or developed area. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to the Pacific Ocean Energy Trust (POET) to administer the Testing and Access for Marine Energy Research (TEAMER) program. The primary objective of TEAMER is to provide marine hydrokinetic (MHK) technology developers access to a network of United States based testing facilities which provide testing and modeling expertise. Access would be provided through competitively awarded funds awarded under TEAMER and administered by POET. POET would be advised by a Technical Board which would include representatives from DOE, DOE National Labs, and National Marine Renewable Energy Centers. There would be up to nine funding cycles.

The proposed project would be divided into 4 tasks. DOE previously completed a NEPA review for tasks 1, 2, and subtask 3.1 (GFO-0008895-001 CX A9; 11/14/2019). This review is for subtasks 3.2, 3.3.1 to 3.3.9, 3.4 and task 4.

Under Sub-tasks 3.2 POET would select participants to receive assistance from approved testing facilities. POET has identified fifteen (15) testing facilities and defined the scope of the testing to be provided. All technical assistance to be provided is limited to assistance by these approved facilities, and limited to the type of assistance described below. If additional facilities are identified to offer technical assistance, or type of assistance is modified a new NEPA review must be completed regarding those proposed changes. All facilities identified below could offer information gathering, computer modeling, and data analysis.

The fifteen facilities identified by POET are:

1. Florida Atlantic University (FAU). Work at FAU could include numerical and control system modeling, numerical modeling and design, and ocean current blade simulation. This work could include both information gathering,

computer modeling, and data analysis as well as laboratory testing. Testing would occur in previously existing laboratory facilities and would be the type of testing in which those facilities regularly engage.

- 2. University of Hawaii. Work at the University of Hawaii could include numerical modeling. This work would be limited to information gathering, computer modeling, and data analysis.
- 3. Oregon State University (OSU). Work at OSU could include laboratory testing and testing in wave basins and wave flumes. This could include work at the Hinsdale Wave Research Laboratory and Directional Wave Basin as well as the Wallace Energy Systems & Renewables Facility (WESRF). These are research facilities that include both small and large scale wave tanks and flumes.
- 4. Stevens Institute. Work at the Stevens Institute could include testing in their high speed towing tank.
- 5. University of Iowa. Work at the University of Iowa could include testing in their towing tank.
- 6. University of Alaska, Fairbanks (UA). Work at UA could include testing in their Power Systems Integration and Microgird Emulation facility. This is a laboratory facility designed for testing marine energy components.
- 7. University of California, Berkeley (UC Berkeley). Work at UC Berkeley could include testing in their wave and tow tank.
- 8. University of Iowa. Work at the University of Iowa could include testing in their wave basin.
- 9. University of Michigan. Work at the University of Michigan could include testing at the Marine Hydrodynamics Laboratory. This laboratory includes a suite of tanks and other facilities that engage in water based experiments.
- 10. University of New Hampshire. Work at the University of New Hampshire could include testing in their wave basin and tow tank.
- 11. University of Washington. Work at the University of Washington could include testing at a variety of tanks and basins including the Alice Taylor flume, the Washington Air-Sea Interaction Research Facility (WASIRF), and the department of Oceanography test tank.
- 12. University of Maine. Work at the University of Maine could include laboratory testing at the Advanced Structures and Composites Center. This facility conducts testing on composites such as concrete samples.
- 13. National Renewable Energy Laboratory (NREL). Work at NREL could include a suite of modeling, cost benefit analysis, Levelized Cost of Energy Analysis and other information gathering and analysis tasks. Work could also include physical testing of specimens or devices at NREL laboratory facilities.
- 14. Sandia National Lab (SNL). Work at SNL could include a wide variety of materials and composite testing at both the Advanced Materials Lab and Geomechanics lab, power take off testing at the Sandia Wave Energy Power Take-off (SWEPT) Lab, and testing at the SNL Lake Facility, an outdoor man made oversized testing tank with drop tower.
- 15. Pacific Northwest National Laboratory (PNNL). Work at PNNL could include testing at the Bio-Acoustics & Flow Laboratory in Richland, Washington as well as the Marine Science Lab in Sequim, Washington. These include both indoor and outdoor testing facilities and testing tanks.

All facilities identified above are preexisting research facilities that regularly engage in the kind of research proposed for this award. No new permits or modifications to facilities would be needed. Existing university and laboratory health and safety procedures would be followed at all times during experiments.

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.

Under subtasks 3.3.1 to 3.3.9 POET would select participants in up to 9 potential rounds of funding. POET would coordinate with selected participants and designated testing facilities to insure NEPA compliance is completed for each selectee prior to release of any funds. Selection of participants is an administrative task limited to information gathering and data collection. All selections made under Subtask 3.3.1 to 3.3.9, however, will be subject to additional NEPA review prior to any work being completed on those projects. All work must be completed by pre-approved facilities identified in sub task 3.2 and must be the type of work reviewed in this or subsequent NEPA determination(s).

Under subtask 3.4 POET would announce selections. Work under this task is limited to information gathering and data analysis.

Task 4 would involve the reporting and dissemination of testing results. Work under this task is limited to information gathering and data analysis.

NEPA PROVISION

DOE has made a conditional NEPA determination.

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

All tasks are approved, however selection of technical assistance recipients is subject to additional NEPA review.

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

All selections of technical assistance recipients made under Subtask 3.3.1 to 3.3.9 will be subject to additional NEPA review and must receive approval from the Contracting Officer prior to any work being completed on those projects.

Include the following condition in the financial assisstance agreement:

All selections of technical assistance recipients made under Subtask 3.3.1 to 3.3.9 will be subject to additional NEPA review and must receive approval from the Contracting Officer prior to any work being completed on those projects.

All work must be completed by pre-approved facilities identified in subtask 3.2 and listed here, and must be the type of work reviewed and approved in the signed NEPA determination(s). Inclusion of additional facilities to this list would require additional NEPA review of those facilities. Approved facilities include:

- 1. Florida Atlantic University.
- 2. University of Hawaii.
- 3. Oregon State University.
- 4. Stevens Institute
- 5. University of Iowa.
- 6. University of Alaska, Fairbanks.
- 7. University of California, Berkeley.
- 8. University of Iowa.
- 9. University of Michigan.
- 10. University of New Hampshire.
- 11. University of Washington.
- 12. University of Maine.
- 13. National Renewable Energy Laboratory (NREL).
- 14. Sandia National Lab (SNL).
- 15. Pacific Northwest National Laboratory (PNNL).

Notes:

Water Power Technologies Office
This NEPA determination does require a tailored NEPA provision.
Review completed by Roak Parker, 07/21/2020

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:	Relectronically Signed By: Roak Parker	Date:	7/22/2020
	NEPA Compliance Officer	_	
FIELD OFFICE MANAGER DETERMIN.	ATION		
✓ Field Office Manager review not required☐ Field Office Manager review required	d		
BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO:			
Field Office Manager's Signature:		Date:	
	Field Office Manager	_	