

PMC-ND  
(1.08.09.13)

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

RECIPIENT: [University of Hawaii](#)

STATE: HI

PROJECT  
TITLE: [Wave Focusing Energy Converter](#)

|  |                                      |                                 |                   |
|--|--------------------------------------|---------------------------------|-------------------|
| <b>Funding Opportunity Announcement Number</b> | <b>Procurement Instrument Number</b> | <b>NEPA Control Number</b>      | <b>CID Number</b> |
| <a href="#">DE-FOA-0001837</a>                 | <a href="#">DE-EE0008629</a>         | <a href="#">GFO-0008629-001</a> |                   |

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** (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.)

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide funding to the University of Hawaii (UH) to design, fabricate, and test a novel wave energy converter (WEC) device. 1/60-scale and 1/20th-scale prototype devices would be fabricated, measuring approximately 18" in diameter and 5' in diameter, respectively. The devices would undergo performance testing both in nearshore waters on the island of Oahu and at a controlled tank facility.

This NEPA determination only applies to:

Subtask 1.1: Development of 1/60th Scale Test Plan for NEPA Approval, and  
Subtask 6.1: Development of 1/20th Scale Test Plan for NEPA Approval.

All other tasks and activities, including device fabrication and testing, would depend on the completion of these test plans. The test plans would provide information on testing procedures, device specifications, safety/environmental protocols, permitting, and the location(s) of in-water testing. Because this information is not yet available, meaningful NEPA review on all other subtasks cannot yet be completed. Accordingly, Subtasks 1.2 – 1.5, Tasks 2 – 5, Subtasks 6.2 – 6.8 and Tasks 7 – 8 are restricted until further NEPA review is completed. Additional NEPA review will be completed once the test plan is submitted and all relevant information has been provided by the Recipient.

Subtasks 1.1 and 6.1 would consist solely of office-based work activities, which would be performed by UH at the Hawaii Natural Energy Institute, in Honolulu, HI. No fabrication or testing would take place as part of this subtask. Due to the nature of the work activities, health and safety risks are considered minimal. UH would adhere to all applicable Federal, state, and local health, safety, and environmental regulations when performing project work.

**NEPA PROVISION**

DOE has made a conditional NEPA determination.

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

[Subtask 1.1](#)  
[Subtask 6.1](#)

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

[Subtasks 1.2 - 1.5](#)

Tasks 2 - 5  
Subtasks 6.2 - 6.8  
Tasks 7 - 8

Notes:

Water Power Technologies Office  
This NEPA determination requires a tailored NEPA Provision.  
NEPA review completed by Jonathan Hartman, 08/16/2019

**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:  Kristin Kerwin Date: 8/19/2019  
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