

PMC-ND

(1.08.09.13)

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



RECIPIENT: CalWave Power Technologies Inc.

STATE: CA

PROJECT TITLE: CWPT Open Water Demonstration

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0001663	DE-EE0008097	GFO-0008097-002	GO8097

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, 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 California Wave Power Technologies, LLC (CalWave) to design, fabricate, conduct laboratory testing, and then field test in an ocean environment a 1:6 scale Wave Energy Conversion device (WEC).

The proposed project is divided into 2 Budget Periods (BP) with a total of 10 tasks. Tasks 1-6 would occur in BP1, Tasks 7-10 would occur in BP2. DOE previously completed a NEPA review for all tasks associated with BP 1 (GFO-0008097; CX A9 and B3.6; 8/16/2017). CalWave now proposes to modify subtask 2.4. This NEPA review is for the proposed modification to subtask 2.4 only.

CalWave had previously proposed in subtask 2.4 to test their WEC device at the University of Maine wave tank testing facility, where data would be gathered regarding controls and load management mechanisms. CalWave now proposes to add two additional wave tank tests to this subtask. First, CalWave proposes to conduct one week of testing at the UC Berkeley Richmond Field Station wave tank testing facility. The purpose of this testing would be to determine that all parts, components, and sensors are in working order and that data can be collected. After this proposed test CalWave proposes to test the device for three weeks at the LIR National Ocean Test Facility wave tank located in Cork, Ireland. The purpose of this test would be to validate design parameters and control mechanisms. Both the Richmond test facility and the LIR facility are existing indoor wave tank testing facilities that are designed to conduct the types of testing proposed.

No modifications to existing facilities or new permits would be required for any of the proposed work in BP1. No hazardous materials would be used in BP1.

Any work proposed to be conducted at a DOE laboratory may be subject to additional NEPA review by the cognizant DOE NEPA Compliance Officer for the specific DOE laboratory prior to initiating such work. Further, any work conducted at a DOE laboratory must meet the laboratory's health and safety requirements.

Based on the review of the proposal, DOE has determined that activities associated with BP1 of the proposal fit within the class of action(s) and the integral elements of Appendix B to Subpart D of 10 CFR 1021 outlined in the DOE categorical exclusion(s) selected above. DOE has also determined that: (1) there are no extraordinary circumstances (as defined by 10 CFR 1021.410(2)) related to the proposal that may affect the significance of the environmental

effects of the proposal; (2) the proposal has not been segmented to meet the definition of a categorical exclusion; and (3) the proposal is not connected to other actions with potentially significant impacts, related to other proposals with cumulatively significant actions, or an improper interim action. All activities associated with BP1 of this proposal are categorically excluded from further NEPA review. Further, DOE has determined that the work to be carried out at LIR is exempt from further review pursuant to Section 5.1.1 of the DOE Final Guidelines for Implementation of Executive Order 12114; "Environmental Effects Abroad of Major Federal Actions."

NEPA PROVISION

DOE has made a conditional NEPA determination for this award, and funding for certain tasks under this award is contingent upon the final NEPA determination.

Insert the following language in the award:

You are restricted from taking any action using federal funds, which would have an adverse affect on the environment or limit the choice of reasonable alternatives prior to DOE/NNSA providing either a NEPA clearance or a final NEPA decision regarding the project.

Prohibited actions include:

All BP2 Tasks

Task 7: Deployment Preparation

Task 8: Deployment

Task 9: Device Testing

Task 10: Recovery, Decommissioning, Post-Processing, and Reporting

This restriction does not preclude you from:

All BP1 Tasks

Task 1: Develop WEC Systems Design

Task 2: Numerical Modeling, Controls Development, and Implementation

Task 3: Subsystems Lab Testing and De-Risking

Task 4: System Fabrication Plan

Task 5: Preliminary IO&M and Teat Plan

Task 6: Open Water Site and Permitting Plan

If you move forward with activities that are not authorized for federal funding by the DOE Contracting Officer in advance of the final NEPA decision, you are doing so at risk of not receiving federal funding and such costs may not be recognized as allowable cost share.

Insert the following language in the award:

You are required to:

Any work proposed to be conducted at a DOE laboratory may be subject to additional NEPA review by the cognizant DOE NEPA Compliance Officer for the specific DOE laboratory prior to initiating such work. Further, any work conducted at a DOE laboratory must meet the laboratory's health and safety requirements.

Note to Specialist :

This NEPA determination requires a tailored NEPA provision.

Water Power Program

NEPA determination completed by Roak Parker 11/9/2017

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:

 Kristin Kerwin
NEPA Compliance Officer

Date: 11/9/2017

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: _____