

PMC-ND

(1.08.09.13)

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

**RECIPIENT:** Columbia Power Technologies, Inc.**STATE:** VA

PROJECT TITLE: Optimization, design, and commercialization planning of next-generation StingRAY H3 Wave Energy Converter

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0002080	DE-EE0008954	GFO-0008954-001	G08954

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 Columbia Power Technologies, Inc. (CPT) to develop a fabrication ready design of their wave energy converter (WEC) known as the StingRAY H3 (H3). The H3 would be designed for grid-connection and at least two years of continuous testing and operation at the proposed PacWave-South (PWS) test site, located off Newport, OR.

Work would include developing preliminary and final designs as well as modeling for the H3 and H3 components. Work would also include the development of planning documents including: project management plans, risk management plans, environmental and site characterizations, commercialization plans, IO&M plans, cost estimations, techno-economic plans, and technology qualification plans. Design and planning work would be completed by CPT at their offices in Corvallis, OR. Support for this work would be received from the National Renewable Energy Lab (NREL) in Golden, CO and Sandia National Laboratories (Sandia) in Albuquerque, NM.

Work would also include assembly and testing of a scale model H3. The H3 would be assembled by CPT at their offices from purchased components. The size of the scale model H3 would be an approximate three foot cube. Individual components would be bench tested at Oregon State University, Wallace Energy Systems & Facility (WESRF) in Corvallis, OR. This is a preexisting University facility that regularly engages in laboratory scale bench testing, including dynamometer testing.

The assembled H3 device would be tank tested at the Oregon State University, O.H. Hinsdale Wave Research Laboratory, also located in Corvallis, OR. This is a preexisting University facility that regularly engages in tank testing.

Both NREL and Sandia may support testing and or conduct bench scale testing at their facilities.

No new permits or modifications to any facilities would be required. All locations where fabrication and testing would occur are preexisting facilities that regularly engage in the type of work being conducted for this project. Existing facility health and safety practices would be followed.

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 final NEPA determination.

Notes:

[Water Power Technologies Office](#)

[This NEPA determination does not require a tailored NEPA provision.](#)

[Review completed by Roak Parker, 3/27/2020](#)

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.

The proposed action is categorically excluded from further NEPA review.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____

 **Roak Parker**
NEPA Compliance Officer

Date: 3/27/2020

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: _____