

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



RECIPIENT: Columbia Power Technologies, inc.

STATE: OR

PROJECT TITLE : SeaRAY k2 Autonomous Offshore Power System Testing at PacWave South

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0002415	DE-EE0009953	GFO-0009953-002	G09953

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. (C-Power) to design, fabricate, and test an autonomous offshore power system (AOPS) powered by a wave energy converter (WEC). C-Power would leverage experience and findings from their previous DOE-funded activities to advance an existing design toward commercial readiness.

This award would be completed over three budget periods (BPs). DOE previously completed a NEPA review of BP1 activities for the proposed project (GFO-0009953-001; CX A9; 06/17/2022). This NEPA Determination (ND) applies only to BP2 activities. DOE would complete the NEPA review for BP3 when sufficient information is available to conduct a meaningful review.

Proposed BP2 activities would include the design and fabrication of a standards-compliant prototype (SeaRAYk2) autonomous offshore power system (AOPS). Work would include desktop design, planning, permitting, procurement activities, fabrication of the prototype subsystems, and bench testing. AOPS procurement and assembly would take place at the C-Power engineering shop (Corvallis, OR) and Harris Thermal Transfer Products (Newburg, OR). Selected subsystem(s) and/or component(s) would be bench tested at the National Renewable Energy Laboratory (NREL, Golden, CO). Permitting and contracting activities for future deployment and testing of the AOPS at PacWave South (Corvallis, OR) would occur to inform BP3 planning and budget refinement. Desktop analyses during BP2 would be performed at several locations: Cardinal Engineering, LLC (Annapolis, MD); Structured Communication Systems, Inc. (Clackamas, OR); 48 North Solutions, Inc. (Seattle, WA); Vectis Sustainable Engineering Ltd. (Cowes, Isle of Wight, United Kingdom); and DNV Renewables Certification USA LLC (Katy, TX).

Project activities involve the use and handling of various components for light assembly and electrical component testing. Hazards would include those normally expected while testing electromechanical equipment in the laboratory setting. All facilities would follow existing corporate health and safety policies and procedures in accordance with federal, state, and local environmental regulations.

All work would be performed at existing, purpose-built facilities. No modifications to facilities, ground disturbing activities, or changes to the use, mission, or operation of facilities would be required. No additional permits, licenses, or authorizations would be required. DOE does not anticipate any impacts to resources of concern due to the proposed award activities.

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 conditional NEPA determination.

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

[Budget Period 2 \(Tasks 6-10\)](#)

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

[Budget Period 3 \(Tasks 11-14\)](#)

Notes:

[Water Power Technologies Office \(WPTO\)](#)
[NEPA review completed by Melissa Parker, 05/24/24](#)

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.

DOE has determined that work to be carried out outside of the United States, its territories and possessions 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."

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](#)

NEPA Compliance Officer

Date: 5/24/2024

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: _____