PMC-ND

(1.08.09.13)

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



RECIPIENT: Northwest Energy Innovations STATE: OR

PROJECT TITLE: Azura™ Demonstration at the Navy's Wave Energy Test Site (WETS)

Funding Opportunity Announcement Number Procurement Instrument Number NEPA Control Number CID Number

DE-FOA-0001081 DE-EE0006923 GFO-0006923-002 GO6923

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

B3.6 Small-scale research and development, laboratory operations, and pilot projects 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.)

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 Northwest Energy Innovations, LLC (NWEI) to design, fabricate, and test a wave energy converter (WEC) device. Fabrication and testing activities would only be completed for a small-scale device.

DOE previously completed one NEPA Determination (ND) (GFO-0006923-001; A9, B3.6; 05/20/2015), which did not apply to all proposed award activities. Award activities which the previous ND applied to have been completed and evaluated. Due to the results of these activities, the remaining proposed award activities have been renegotiated and have changed significantly. This ND (GFO-0006923-002) applies to the remaining tasks.

This award no longer proposes to fabricate, install, and test a full-scale WEC at the U.S. Navy's Wave Energy Test Site (WETS) (Kaneohe Bay, HI). Instead, additional work of an analytical and academic nature would be completed, including data analysis, designing, computer modeling, and document preparation. Additional activities would include the fabrication of a power take-off (PTO) system which would be tested by Energy Hydraulics Limited in a laboratory setting (New Plymouth, New Zealand). NWEI would discuss with DOE and National Laboratory personnel if additional wave tank testing of a small-scale WEC device would be appropriate. If so, such activities would be completed at the University of Maine (Orono, ME) using the same small-scale WEC device used in earlier award activities. The device would possibly be modified for such tests.

All award activities would occur at facilities which are preexisting purpose-built facilities for the type of work to be conducted for this award. Facility modifications would not be required. Award activities would involve typical hazards associated with engineering laboratory activities and water tank testing, including handling and use of hazardous materials, operation of potentially hazardous equipment, and site-specific environmental hazards. Existing health, safety, and environmental policies and procedures would be followed to mitigate hazards to acceptable levels. Mitigated hazards would pose negligible risks to the public and environment. All activities would comply with existing federal, state, and local laws and regulations.

DOE has considered the scale, duration, and nature of proposed activities to determine potential impacts on resources, including those of an ecological, historical, cultural, and socioeconomic nature. DOE does not anticipate impacts on these resources which would be considered significant or require DOE to consult with other agencies or stakeholders.

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 (WPTO) NEPA review completed by Dan Cahill, 07/27/2023	3.

#### 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."

The proposed action is categorically excluded from further NEPA review.

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Field Office Manager