PMC-ND

(1.08.09.13)

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



RECIPIENT: Oscilla Power Inc STATE: WA

PROJECT TITLE: Performance Optimization and System Demonstration of a Multi-Mode Point Absorber

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

DE-FOA-0001837 DE-EE0008625 GFO-0008625-002 GO8625

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 Smallscale 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 Oscilla Power, Inc. (OPI) to design, fabricate, and test a prototype wave energy converter (WEC). The WEC would be tested in Penobscot Bay in proximity of Castine, ME.

DOE previously completed one NEPA Determination (ND) (GFO-0008625-001; A9, B3.6; 05/17/2019), which applied to Tasks 1-8. This ND (GFO-0008625-002) applies to Tasks 9 – 11. DOE will complete a NEPA review for Tasks 12 – 15, when sufficient information is available to conduct a meaningful review.

Tasks 9 – 11 would involve fabrication, laboratory testing, and permitting activities. The fiberglass and aluminum hull of the WEC (approximately 3.8m x 5.0m x 2.4m) would be fabricated by Janicki Industries (Sedro-Woolley, WA) and transported to OPI (Seattle, WA). OPI and Applied Motion Systems (AMS) (Vancouver, WA) would fabricate and laboratory test internal subsystems and electrical components, which would later be installed in the WEC hull at OPI's facility. These activities would include procurement and installation of commercially available components. The University of Maine (UMaine) (Orono, ME) would fabricate a reinforced concrete reactor ring (approximately 6.0m x 6.0m x 1.0m).

All facilities at OPI, AMS, UMaine, and Janicki 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 the handling and use of hazardous materials, including industrial solvents, metals, and electrical components. All such handling and storage would occur within controlled laboratory settings and would follow existing policies and procedures for handling and disposal of these materials. Award activities would involve typical hazards associated with WEC fabrication, including handling of tools, electrical components, and heavy equipment and materials. Existing corporate and university health, safety, and environmental policies and procedures would be followed at all facilities, including: personnel training, proper personal protective equipment (PPE), engineering controls, monitoring, and internal assessments.

OPI would collaborate with Kleinschmidt Associates to obtain all necessary permits and permissions for an open water deployment in Penobscot Bay. Such activities would occur concurrent to fabricating and testing activities.

DOE has considered potential impacts on resources, including those of an ecological, historical, cultural, and socioeconomic nature. DOE does not anticipate adverse impacts on these resources.

NEPA PROVISION

1	DOE has	made a	conditional	NEPA	determination.

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

Task 9

Task 10

Task 11

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

Task 12

Task 13

Task 14

Task 15

Notes:

Water Power Technologies Office (WPTO) NEPA review completed by Dan Cahill, 07/19/2022.

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:	Electronically Signed By: Casey Strickland	Date:	7/22/2022	
	NEPA Compliance Officer	_		

FIELD OFFICE MANAGER DETERMINATION

~	Field Office Manager review not required
	Field Office Manager review required

Field Office Manager's Signature:		Date:	
	Field Office Manager		

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO: