

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



**RECIPIENT:** Sea Potential LLC

**STATE:** ME

**PROJECT TITLE :** DUO-DS Wave Powered Desalination System Sea Trials

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
DE-FOA-0002793	DE-EE0010981	GFO-0010981-001	

**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 Sea Potential LLC to design, develop, fabricate, and field test a wave powered desalination system. The award would include bench testing and deployment and retrieval of a Spotter Buoy at the proposed test site off the coast of Massachusetts.

The proposed award activities would occur over two budget periods (BPs), with one Go/No Go decision point between the BPs. This NEPA Determination (ND) only applies to Tasks 0, 1, 2, 3, 5, 6, and 8, as well as Subtask 4.1. This NEPA Determination does not apply to Subtask 4.2 or Tasks 7, 9, and 10. Some details in these tasks are not yet fully defined and are contingent upon the outcomes of activities in Tasks 1, 2, 3, 5, 6, 8 and Subtask 4.1. DOE would complete an additional NEPA review for the other tasks when sufficient information is available to conduct a meaningful review.

Activities in Tasks 0, 1, 2, 3, 5, 6, 8 and Subtask 4.1 would include project management, modeling, technical requirement review, preconstruction design, research and development (R&D) activities, bench testing, fabrication planning, permitting and federal and state agency applications, technical economic analyses, device manufacturing, and Diversity, Equity, and Inclusion activities. Sea Potential LLC (Portland, ME) would perform desk-based design, technical, and management activities. Leidos, Gibbs, and Cox (Houston, TX), Marine Renewable Collaborative (Marion, MA), Pure Marie Gen Ltd (Belfast, Northern Ireland, UK), and Colloide Engineering Systems Ltd (Cookstown, Northern Ireland, UK) would assist with design, technical, and project management activities. The National Renewable Energy Laboratory (NREL; Arvada, CO) would perform bench tests of pumping and desalination systems using existing test rig facilities, as well as carry out R&D activities to validate offshore technology in a laboratory environment.

Hazardous materials or activities may be present during award activities, including test rigs and machinery with high forces and loads. NREL health and safety policies and procedures would be followed in order to mitigate and minimize any safety hazards.

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 conditional NEPA determination.

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

Tasks 0, 1, 2, 3, 5, 6, and 8, as well as Subtask 4.1.

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

Tasks 7, 9, and 10, as well as Subtask 4.2.

Notes:

Water Power Technologies Office (WPTO)  
NEPA review completed by Alex Colling on 06/13/2024.

## 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:



Signed By: Andrew Montano

Date: 6/21/2024

NEPA Compliance Officer

## 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: \_\_\_\_\_