PMC-ND (1.08.09.13)

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



RECIPIENT: University of Alaska Fairbanks

PROJECT TITLE:

Modeling the Integration of Marine Energy into Microgrids

Funding Opportunity Announcement Number

Procurement Instrument Number

NEPA Control Number CID Number

STATE: AK

DE-FOA-0002234 EE0009445 GFO-0009445-001

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

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 dissemination informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide funding to the University of Alaska Fairbanks to develop field-data informed and validated models of marine energy converters spanning several simulation platforms and time scales. Data would be collected and processed from marine resource datasets, including from existing marine and hydrokinetic (MHK) energy devices and the Wave Energy Converter Simulator, and used to generate power system models. These models would be used to inform MHK energy device sizing and design, energy balance and dispatch, and the ability to operate after disturbances. Frameworks and best practices would be created to support the integration of MHK energy devices into the microgrid and electric utility industry. A case study would be performed to demonstrate the use of the developed models and the technical and economic opportunities and challenges for MHK energy device integration into microgrids.

University of Alaska Fairbanks would coordinate all project activities and would be assisted by project partner Oregon State University. Work activities would be limited to data processing, computer based modeling, literature surveys, analytical reviews, and written summaries of results for publication. Project work would be performed at existing, purpose-built facilities operated by University of Alaska Fairbanks and it project partners. No changes in the use, mission, or operation of existing facilities would be required as part of this project and no additional permits would be required in order to conduct any of the work activities.

Because project work would be limited to office-based activities, health and safety risks would be minimal. Nonetheless, University of Alaska Fairbanks and its project partners would adhere to established corporate health and safety policies and procedures in order to mitigate against any potential health and safety hazards. University of Alaska Fairbanks and its project partners would also observe all applicable Federal, state, and local health, safety, and environmental regulations.

NEPA PROVISION

DOE has made a final NEPA determination.

Include the following condition in the financial assisstance agreement:

No field tests or field data collection may be conducted under Task 5.2

Notes:

Water Power Technologies Office
This NEPA determination does not require a tailored NEPA provision.
Review completed by Shaina Aguilar on 6/10/21.

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:	Signed By: Roak Parker	Date:	6/10/2021
	NEPA Compliance Officer	<u> </u>	
FIELD OFFICE MANAGER DETERMIN.	ATION		
✓ Field Office Manager review not required☐ Field Office Manager review required	d		
BASED ON MY REVIEW I CONCUR WI	TH THE DETERMINATION OF THE NCO:		
Field Office Manager's Signature:		Date:	
	Field Office Manager		·