PMC-ND

U.S. DEPARTMENT OF ENERGY (1.08.09.13) OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY NEPA DETERMINATION



RECIPIENT: Oregon State University

STATE: OR

PROJECT Coupled Aerodynamic and Hydrodynamic Hybrid Simulation of Floating Offshore Wind Turbines TITLE:

Funding Opportunity Announcement Number Procurement Instrument Number NEPA Control Number CID Number DE-FOA-0002071 DF-FF0008960 GFO-0008960-001

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	Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data
gathering,	analysis (including, but not limited to, computer modeling), document preparation (including, but not limited
analysis, and	to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information
dissemination	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.)

B5.15 Small- scale	
renewable energy research and development and pilot projects	Small-scale renewable energy research and development projects and small-scale pilot projects, provided that the projects are located within a previously disturbed or developed area. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

Rationale for determination:

The Department of Energy is proposing to provide federal funding to Oregon State University to create a system to characterize the performance of the next generation of substructures and wind turbine components. Proposed project activities would be conducted over two budget periods and include the design, development, and construction of a real-time hybrid simulation framework for the testing of floating offshore wind turbines. The project would result in the development of a robust, modular, and extendable framework for hydro-real-time hybrid simulation testing. This research would enable wind/wave testing of Floating Offshore Wind Turbines, thereby supporting innovative research and development related to offshore wind energy.

Budget Period 1 would consist of reporting, data analysis, modeling, and preliminary engineering design. And, Budget Period 2 would consist of reporting, data analysis, modeling, equipment procurement, equipment fabrication, and testing. Activities would be conducted in the office spaces and the multi-directional wave basin at Oregon State University in Corvallis, OR. There would be no field testing conducted as part of this project. All fabrication and testing activities would take place in Hinsdale Wave Research Lab at Oregon State University.

DOE does not anticipate any impacts to resources of concern as a result of this project.

NEPA PROVISION

DOE has made a final NEPA determination.

Notes:

Wind Energy Technologies Office This NEPA Determination does not require a tailored NEPA provision. U.S. DOE: Office of Energy Efficiency and Renewable Energy - Environmental Questionnaire

KKerwin 12/26/2019

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:

NEPA Compliance Officer

Date: 12/26/2019

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: