



U.S. Department of Energy Categorical Exclusion Determination Form

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Proposed Action Title: Ocean Renewable Power Company - Deployment and Retrieval System for Cross-flow Hydrokinetic Turbines

Program or Field Office: Advanced Research Projects Agency - Energy

Location(s) (City/County/State): Portland, ME; State College, PA

Proposed Action Description:

Funding will support the project team's small-scale, research and development activities to develop a marine hydrokinetic deployment and retrieval device intended to significantly reduce costs for cross-flow design marine hydrokinetic systems, in which a turbine generates power from tides and/or rivers. Specifically, the project team will: (1) develop multiple computational models to analyze forces generated on a variable pitch cross-flow turbine; and (2) validate the analytical models, implement control system design, and evaluate control system performance. Field testing is not authorized at this time.

The project team will comply with applicable local, state, and federal regulations and incorporate appropriate control technologies and best management practices in all project activities. Prime Recipient Ocean Renewable Power Company (ORPC) is required, under the terms of its ARPA-E Cooperative Agreement, to secure all necessary permits prior to initiating field testing and to provide ARPA-E with written assurances of acquiring such permits prior to field testing. Field testing may only proceed after an amended NEPA determination is issued by ARPA-E. Bodies of water proposed for use for testing are the Kvichak River in Igiugig, Alaska and Cobscook Bay, Maine. Both locations have been used for previous ORPC field testing for similar activities, including the RivGen testing at Kvichak River in 2014 and 2015 and TidGen and OCGen testing at Cobscook Bay between 2012 and 2014. No modifications will be made to existing facilities to accommodate the proposed work.

Categorical Exclusion(s) Applied:

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

B5.25 - Small-scale renewable energy research and development and pilot projects in aquatic environments

For the complete DOE National Environmental Policy Act regulations regarding categorical exclusions, including the full text of each categorical exclusion, see Subpart D of 10 CFR Part 1021.

Regulatory Requirements in 10 CFR 1021.410(b); (See full text in regulation)

The proposal 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 proposal that may affect the significance of the environmental effects of the proposal.

The proposal 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.

Based on my review of the proposed action, as NEPA Compliance Officer (as authorized under DOE Order 451.1B), I have determined that the proposed action fits within the specified class(es) of action, the other regulatory requirements set forth above are met, and the proposed action is hereby categorically excluded from further NEPA review.

NEPA Compliance Officer:

Date Determined: 03/03/2016

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