

## U.S. Department of Energy Categorical Exclusion Determination Form

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Proposed Action Title: Acclo Energy - EHD Innovative Low-Cost Offshore Wind Energy

<u>Program or Field Office</u>: Advanced Research Projects Agency - Energy <u>Location(s) (City/County/State)</u>: Ann Arbor, MI; Orono, ME; Castine, ME

## Proposed Action Description:

Funding will support the project team's small-scale, research and development activities to develop an electrohydrodynamic (EHD) turbine-less wind energy system that harvests energy through physical separation of charge, which will then be tested in offshore setting in an effort to prove the cost and performance advantages of the EHD wind energy generator. Specifically, the project team proposes to (1) model, design, fabricate, and conduct performance testing of prototype EHD panel and (2) model, design, fabricate, and conduct performance testing of subsystems for an outdoor prototype EHD panel. Field testing is not yet authorized.

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. Accio Energy 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.

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 <u>10 CFR Part 1021</u>.

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:

(This form will be locked for editing upon signature)

Date Determined: 02/16/2016