PMC-ND

(1.08.09.13)

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



RECIPIENT: NYSERDA STATE: NY

PROJECT TITLE:

National Offshore Wind Research and Development Consortium

Funding Opportunity Announcement Number DE-FOA-0001767

Procurement Instrument Number DE-EE0008390

NEPA Control Number CID Number GFO-0008390-021

GO8390

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.)

B3.6 Smallscale 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 the New York State Energy Research and Development Authority (NYSERDA) to form a not-for-profit 501(c)(3) entity, the "National Offshore Wind Research and Development Consortium" which would be led by NYSERDA, along with key industry stakeholders and research institutions. The Consortium would finance research initiatives seeking to address the technical barriers faced by offshore wind developers, original equipment manufacturers (OEMs) and supply chain partners, with the goal of reducing the Levelized Cost of Electricity (LCOE) for U.S. offshore wind plants and increasing opportunities for U.S. manufacturing.

The proposed project is divided into four (4) Budget Periods (BPs). DOE previously completed NEPA reviews for BP1, 2 and 3 (GFO-0009380-001 CX A1, A9 and A13, 10/09/2018; GFO-0009380-002 CX A1, A9 and A13, 01/13/2020; GFO-0009380-019 CX A1, A9 and A13, 12/02/2020). In addition DOE completed NEPA reviews for 16 subawards made by the consortium under Task 19 (GFO-0009380-003 to 018, various CX determinations and dates) as well as awards under an Annual Operating Plan to the National Renewable Energy Laboratory. This NEPA review is for a sub award proposed to be made under Task 27 to Principle Power Inc.

Task 27 in BP3 involves reviewing applications received in response to the solicitation released in Task 26, and then choosing specific projects which would receive a sub award. While NYSERDA is allowed under the previous NEPA determination to proceed with choosing projects under Task 27, all projects chosen for sub award are subject to additional NEPA analysis prior to NYSERDA contracting for the sub award and prior to any work being completed on the sub award.

Under the proposed sub award Principle Power would design, fabricate, and test a polymer spring component for use in shallow water mooring systems for Floating Offshore Wind Turbine (FOWT) applications. Principle Power and its project partners would also develop mooring modeling software and simulation techniques.

Proposed project activities would include data analysis, computer modeling, conceptual design work, component fabrication, and component performance testing. All project work would be coordinated by Principle Power.

Data analysis and computer modeling would focus on characterizing representative mooring site locations across the

Eastern Coast of the United States. Existing data would be acquired from representative site locations. No field testing or installations would occur. These activities would be performed by Principle Power (Emeryville, CA), Technology From Ideas ('TFI' – New York, NY), and the National Renewable Energy Laboratory ('NREL' – Golden, CO). NREL would also develop mooring modeling software, which would be utilized throughout the project.

Conceptual design work would focus on development of the polymer spring component. Both Principle Power and TFI would participate in conceptual design development. TFI would fabricate polymer spring component test samples. The samples would be fabricated in coordination with TFI's testing partner, so as to confirm that the design specifications meet the requirements for testing at the selected testing facility. Performance testing would likely be completed at Aker Solution's dedicated testing facility in Mobile, AL. However, another industry partner may be selected, depending on the needs of the project team. In all cases, testing would be performed at an existing, purpose-built testing facility. No physical modifications to existing facilities, ground disturbance, or changes to the use, mission, or operation of existing facilities would be required. No additional permits or authorizations would be required.

Project work would involve the use and handling of industrial chemicals. All such handling would occur in controlled laboratory/testing environments. Potential hazards would be mitigated through adherence to established institutional health and safety policies and procedures. Principle Power and its project partners would observe all applicable Federal, state, and local health, safety, and environmental regulations.

Any work proposed to be conducted at a DOE laboratory may be subject to additional NEPA review by the cognizant DOE NEPA Compliance Officer for the specific DOE laboratory prior to initiating such work. Further, any work conducted at a DOE laboratory must meet the laboratory's health and safety requirements.

NEPA PROVISION

DOE has made a conditional NEPA determination.

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

Budget Period 1

Budget Period 2

Budget Period 3

Sub Award to Principle Power

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

Budget Period 4

Notes:

This NEPA determination does require a tailored NEPA provision Wind Energy Technology Office Review completed by Jonathan Hartman, 04/09/2021

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.

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: 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: