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

National Offshore Wind Research and Development Consortium TITLE:

Funding Opportunity Announcement Number Procurement Instrument Number NEPA Control Number CID Number DE-FOA-0001767 DE-EE0008390 GFO-0008390-009 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 two NEPA reviews [Budget Period 1 (BP1 - Tasks 1-10 and 12-16) (GFO-0008390-001 CX A1, A9 and A13, 10/09/2018); and BP1 Task 11 and BP2 all Tasks (GFO-0008390-002 CX A1, A9 and A13, 1/13/2020)]. In addition, DOE has completed NEPA reviews for specific sub awards under Task 19. This NEPA review is for a sub award proposed to be made under Task 19 to Triton Systems, Inc. (Triton).

Task 19 in BP2 involves reviewing applications received in response to the solicitation released in Task 18, 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 19, 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 Triton would design, develop, fabricate, and test a modular anchor structure for a 15-Mw sized offshore floating wind turbine. Triton and project partners University of Massachusetts, Amherst (UMass) and University of Rhode Island, would complete design and geotechnical analysis work. These tasks would be completed in office environments.

Fabrication and assembly of the proposed anchor system would occur at Triton facilities in Chelmsford, MA, with some components being purchased from vendors who produce those components in their regular course of business. The anchors would be fabricated from approximately 4 cubic yards of concrete and 30,000 pounds of steel. During fabrication and assembly there could be general health and safety hazards to workers including, lifting heavy equipment, chemical use, heavy machine use, and hydraulic pressure/flow. Triton has existing general company-wide

policies (Standard Operating Procedures) in place for all these types of activities including machine safety, emergency eye wash & shower, respiratory protection, and proper protective equipment. All personnel directly involved with these hazard activities would get additional project specific employee training. Additional project specific policies and procedures would be implemented as necessary as new health and safety risks are identified that are not covered under existing standard operating policies. Triton will use a job safety analysis for all major lab activities to include: machining, assembly, and testing.

Once fabricated, the anchors would be shipped to UMass for testing at the University's National Geotechnical Experimentation Site. This site is one of six specific national testing facilities in the United States designed for geotechnical testing of structures such as bridges and buildings, but also including anchors. The site is a large out door facility, enclosed in fencing, and which includes a variety of heavy machinery and equipment for testing structures. Testing of two groups of anchors, totaling approximately 25 anchors, would occur over a one week period. All existing University health and safety procedures would be followed during testing.

The American Bureau of Shipping would conduct certification activities regarding the anchor and anchor process.

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 Sub Award to Triton Systems Inc.

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

Budget Period 3 Budget Period 4

Include the following condition in the financial assissance agreement:

Notes:

This NEPA determination does require a tailored NEPA provision Wind Energy Technology Office Roak Parker 07/28/2020

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:		Electronically Signed By: Roak Parker	Date:	7/29/2020
		NEPA Compliance Officer		
FIELD OFFICE MANAGER DETERMINATION				
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BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO:				
Field Office Manager's Signature:			Date:	
		Field Office Manager	<u> </u>	