

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



RECIPIENT: New York State Energy Research and Development Authority

STATE: NY

PROJECT TITLE : National Offshore Wind Research and Development Consortium

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0001767	DE-EE0008390	GFO-0008390-044	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 dissemination** 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 informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)

**B3.6 Small-scale 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 BP 1, 2, 3, and 4 (respectively, GFO-0008390-001 CX A1, A9, and A13, 10/09/2018; GFO-0008390-002 CX A1, A9, and A13, 1/13/2020; GFO-0008390-019 CX A1, A9, and A13, 12/02/2020; GFO-0008390-042 CX A1, A9, A11, and A13, 12/28/2021). In addition, DOE completed NEPA reviews for 16 subawards made by the consortium under Task 19 and 22 subawards made by the consortium under Task 27 as well as awards under an Annual Operating Plan to the National Renewable Energy Laboratory (various CX determinations and dates). This NEPA review is for a change of location for a sub-award to Triton Systems, Inc. (Triton) proposed under Task 19, originally reviewed on 7/20/2020 (GFO-0008390-009, CXs A9, B3.6). Triton, the sub awardee, had initially contracted with a different entity to perform on-site testing. This site has now been changed to University of Rhode Island (URI), specifically the Peckham Farm outdoor research area. This change of location requires a new NEPA review, with other NYSERDA subawards continuing unaffected.

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 URI, would complete design and geotechnical analysis work. UMass testing would be carried out at the university's National Geotechnical Experimentation Site (NGES), and URI testing would be carried out at Peckham Farm, an on-campus research area in an outdoor open field. Aside from the location change, project activities remain unchanged from the original NEPA determination. This NEPA review is being conducted primarily to assess the Peckham Farm site. The U.S. Department of Agriculture Natural Resource Conservation Services Web Soil Survey database shows that the testing site at Peckham Farm contains prime farmland and farmland of statewide importance. There would be minimal impact to the farmland as there would not be any permanent installation of equipment, and the site is previously disturbed and used for animal grazing. The area of prime farmland used for this project would not be permanently converted, and testing activities would not be carried out for a long period. As there will be no change to the use of land at this site, DOE has determined the proposed project will have no effect on prime farmland.

Proposed sub award activities would include installing helical piles, building a foundation for the anchors, testing the anchors, and then removing them. The foundation for the anchors would be approximately 60 square feet with an additional 10 square feet of disturbance. The anchors would be approximately 30 feet in depth. Anchors would consist of nine helical piles and a skirt. Anchors would be installed into the ground using normal helical anchor installation. Three anchors would be installed in total, and testing would consist of assessing a single anchor as a baseline, and two group anchors for comparison. Testing would be carried out by pulling the anchors out of the ground. Testing length would be approximately 1 week: 2 days of installation, 2 days of testing, and 1 day of removal. The anchor would be removed after testing.

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 would use a job safety analysis for all major lab activities to include: machining, assembly, and testing.

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

Any work proposed to be conducted at a federal facility may be subject to additional NEPA review by the cognizant federal official and must meet the applicable health and safety requirements of the facility.

## 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.  
Budget Period 3  
Budget Period 4

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

All sub awards made under Task 35 (in Budget Period 4) will be subject to additional NEPA review prior to any work being completed on those projects.

Notes:

Wind Energy Technologies Office (WETO)  
Review completed by Alex Colling on 05/26/2022.

**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:  \_\_\_\_\_ Date: 6/2/2022  
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: \_\_\_\_\_ Date: \_\_\_\_\_  
Field Office Manager