

**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-0008390-045b | G08390 |

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:

- | | |
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| 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.) |
| B3.16 Research activities in aquatic environments | Small-scale, temporary surveying, site characterization, and research activities in aquatic environments, limited to: (a) Acquisition of rights-of-way, easements, and temporary use permits; (b) Installation, operation, and removal of passive scientific measurement devices, including, but not limited to, antennae, tide gauges, flow testing equipment for existing wells, weighted hydrophones, salinity measurement devices, and water quality measurement devices; (c) Natural resource inventories, data and sample collection, environmental monitoring, and basic and applied research, excluding (1) large-scale vibratory coring techniques and (2) seismic activities other than passive techniques; and (d) Surveying and mapping. These activities would be conducted in accordance with, where applicable, an approved spill prevention, control, and response plan and would incorporate appropriate control technologies and best management practices. None of the activities listed above would occur within the boundary of an established marine sanctuary or wildlife refuge, a governmentally proposed marine sanctuary or wildlife refuge, or a governmentally recognized area of high biological sensitivity, unless authorized by the agency responsible for such refuge, sanctuary, or area (or after consultation with the responsible agency, if no authorization is required). If the proposed activities would occur outside such refuge, sanctuary, or area and if the activities would have the potential to cause impacts within such refuge, sanctuary, or area, then the responsible agency shall be consulted in order to determine whether authorization is required and whether such activities would have the potential to cause significant impacts on such refuge, sanctuary, or area. Areas of high biological sensitivity include, but are not limited to, areas of known ecological importance, whale and marine mammal mating and calving/pupping areas, and fish and invertebrate spawning and nursery areas recognized as being limited or unique and vulnerable to perturbation; these areas can occur in bays, estuaries, near shore, and far offshore, and may vary seasonally. No permanent facilities or devices would be constructed or installed. Covered actions do not include drilling of resource exploration or extraction wells. |

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, 3, and 4 (GFO-0008390-001 CX A1, A9, and A13, 10/09/2018; GFO-0008390-002 CX A1, A9, and A13, 01/13/2020; 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 subaward proposed to be made under Task 35 to Anduril Industries (previously named Dive Technologies). Anduril received a NEPA determination for Tasks 0 through 2 on 9/23/22. This review specifically applies to Anduril's remaining tasks, Tasks 3 through 5.

Task 35 in BP4 involves reviewing applications received in response to the solicitation released in Task 34 and then choosing specific projects which would receive a subaward. While NYSERDA is allowed under the previous NEPA determination to proceed with choosing projects under Task 35, all projects chosen for subaward are subject to additional NEPA analysis prior to NYSERDA contracting for the subaward and prior to any work being completed on the subaward.

Under this proposed subaward, Anduril would develop and demonstrate a fully autonomous subsea asset inspection autonomous underwater vehicle (AUV). Testing and final demonstration would take place on the Point Judith-to-Block Island power cable. Tasks previously reviewed included developing new AUV algorithms for subsea cable anomaly detection and fully integrating the sensor suite on the DIVE-LD vehicle. During the remainder of the project, ocean testing would be performed along the continental shelf near Rhode Island from Block Island, RI to Pt. Judith, RI. This would include a subsea geophysical survey of Block Island wind farm power export cable performed by a battery powered AUV. Anduril would supervise the at-sea test with a small diesel-powered lobster boat.

Description of tasks are as follows:

Task 3 – System integration testing phase prior to at-sea operations. Perform a detailed check out and characterization of vehicle system, including sensors, while the vehicle is in the full-scale test tank located in the production bay.

Task 4 - System integration testing phase with initial and final at-sea testing. Initial at-sea testing would be conducted to verify fully functioning sea floor infrastructure inspection system in its operationally relevant environment. This would be performed in Massachusetts Bay or Buzzards Bay. The test is expected to take up to 5 to 10 days, depending on weather conditions. Any issues that would prevent the successful final demonstration of the system would be resolved. The final at-sea system demo would be conducted to verify that the system meets seafloor infrastructure inspection objectives. This would be a pier-launched autonomous inspection of the Block Island Wind Farm export cable.

Task 5 - Final report.

Inspection/imaging activities in Task 4 would involve the deployment of equipment into ocean waters where Endangered Species Act (ESA) listed species may be present. The Bureau of Ocean Energy Management (BOEM) Offshore Wind Site Assessment and Site Characterization Activities Programmatic Consultation (date June 29, 2021) addresses the types of activities proposed in this project and in New England waters, allowing for an expedited consultation process. On October 6, 2022, DOE sought concurrence from the National Marine Fisheries Service (NMFS) that project activities are covered under this programmatic consultation. On October 11, 2022 NMFS concurred with DOE's determination of no affect to species of concern provided that implementation of relevant Project Design Criteria (PDCs) and their associated Best Management Practices (BMPs) in the programmatic consultation (noted in conditions) would be required to be implemented to minimize impacts to the marine environment and listed species.

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
Budget Period 3
Budget Period 4
Sub Award to Anduril Industries

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.

Include the following condition in the financial assistance agreement:

The relevant Project Design Criteria (PDC) and their associated Best Management Practices (BMPs) described in the BOEM Offshore Wind Site Assessment and Site Characterization Activities Programmatic Consultation would be implemented in the following manners:

PDC 3: Marine Trash and Debris Awareness and Prevention

- BMP 2-4: Anduril Project Lead on the vessel will ensure compliance with BMP 2-4, to include ensuring materials are properly secured to prevent loss overboard, properly marked if there is a reasonable risk of losing the item overboard; prevent trash and debris, and immediately recover any such material, and report any marine trash and debris lost or discarded.

PDC 4 : Minimize Interactions with Listed Species during Geophysical Survey Operations

- The Edgetech sub bottom profiler operates at frequencies less than 180kHz.
- When the Edgetech sub bottom profiler is in use, a clearance zone of 500 meters in all directions will be established 30 minutes prior to survey by a 3rd party PSO onboard the surface vessel accompanying the DIVE-LD AUV.
- A PSO will monitor and provide Clearance Zone and Shutdown Zone monitoring, as required.
- PSO and Anduril Crew Lead will provide a pre-departure briefing to all personnel on the requirements to report and visual sightings of listed species.

PDC 5: Minimize Vessel Interactions with Listed Species

- Vessel captain and Anduril Crew Lead will provide a pre-departure briefing to the crew to comply with vigilant watch requirements while at-sea and ensure compliance with BMP 1-6.
- Vessel captain and PSO (if required), will ensure transiting vessel monitoring, maintain separation distances and ensure safe vessel operation to permit detecting and avoiding any animals sighted.
- Before starting at-sea testing, the PSO will brief the Crew on the actions and requirements in the event of at-sea operations being suspended due to PSO detection of species, and the associated Clearance Zone and Shutdown Zone requirements. The PSO will brief the crew on the signal and messages he will provide in the event of detecting a protected species within the minimum separation distance. The Crew will review and be prepared to safely stop AUV survey operation, or take any PSO directed action, or cease all operations and propulsion until PSO authorization is obtained.

PDC 6: Minimize Risk During Buoy Deployment, Operations, and Retrieval

- No mooring or buoy deployment activities are anticipated; however the Anduril Crew Lead, Vessel Captain and crew will ensure compliance with BMPs 1-6.
- BMP 4: Prior to and during deployment and retrieval, if listed species are observed within 500 m of the vessel the team will take appropriate action to stop/place the AUV in a safe condition.

PDC 7: Protected Species Observers

- Anduril will comply and use qualified NMSF-approved 3rd party PSOs, if required, when performing at-sea testing funded under this project and will comply with BMPs 1-6.

PDCs 8: Reporting Requirements

- DOE is the action agency and will perform any reporting resulting from at-sea testing through the NEPA Specialist supporting the project. Any reporting should be sent to DOE (action agency) and NMFS GARFO (nmfs.gar.incidental-take@noaa.gov).

Notes:

Wind Energy Technologies Office

This NEPA determination requires legal review of the tailored NEPA provision.

Review completed by Shaina Aguilar on 2/17/23.

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: _____



Casey Strickland

NEPA Compliance Officer

Date: 2/21/2023

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: _____