PMC-ND

(1.08.09.13)

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-0008390-056	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.
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” (hereinafter “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, and supply chain partners, with the goal of reducing the levelized cost of electricity for U.S. offshore wind plants and increasing opportunities for U.S. manufacturing.

The award is divided into four (4) Budget Periods (BPs). DOE previously completed NEPA reviews for BP1, 2, and 3 (GFO-0008390-001, CX A1/A9/A13, 10/09/2018; GFO-0008390-002, CX A1/A9/A13, 01/13/2020; and GFO-0008390-019, CX A1/A9/A13, 12/02/2020). DOE also completed NEPA reviews for subawards made by the Consortium under Task 19 as well as awards under an Annual Operating Plan to the National Renewable Energy Laboratory (NREL). This NEPA review is for a subaward made under Task 27 to PCCI, Inc. (PCCI). Task 27 involves reviewing applications received in response to the solicitation released in Task 26, and then choosing specific projects which would receive a subaward. While NYSERDA is permitted under a previous NEPA Determination (ND) to proceed with choosing projects under Task 27, all projects chosen for subawards are subject to additional NEPA review prior to NYSERDA contracting for the subaward and prior to any work being completed on the subaward.

PCCI's subaward received a DOE NEPA review for Tasks 1 – 6 (GFO-0008390-030, CX A9/B3.6, 08/20/2021) which did not cover Tasks 7 or 8. Since, the Statement of Work (SOW) was updated to reflect the site selection of the at-sea Intelligent Mooring System (IMS) test and, as a result, the order of tasks changed. The IMS Product Design Assessment and Certification task originally proposed as Task 4 is now Task 7 in the updated SOW. Due to this change, the ¼-Scale At-Sea Test task is now proposed for Task 6. Task 8 – Final Report remains the same. This ND addresses Tasks 6 – 8 as shown in the most recent SOW.

Under this subaward, PCCI and its partners would fabricate, install, test, and retrieve a ¼-scale prototype IMS. An IMS is defined as an adjustable pneumatic mechanism meant to reduce the size and cost of moorings for floating wind platforms. PCCI (Alexandria, VA) would be responsible for project management.

Task 6 involves at-sea testing of the prototype IMS. At-sea testing is proposed to occur approximately 3.5 nautical miles offshore of Virginia Beach, VA from October 2024 to May 2025. Vessels and divers would be utilized to install and retrieve the prototype IMS. Specifically, the Virginia Institute of Marine Science (Gloucester Point, VA) would charter the 93-foot "RV Virginia" with the anchors, chain, and buoy onboard to the testing site from the Ampro Shipyard in Weems, VA. A tugboat owned and operated by Norfolk Tug Company (Norfolk, VA) would be responsible for setting the anchors in place. Marine Solutions, Inc. (Marine Solutions; Virginia Beach, VA) divers would travel to the test site from a marina in Little Creek, VA via a dive boat and assemble the remaining mooring lines and make the system taut. While in the water, a buoy would be the only surface feature of the IMS. The buoy would be equipped with pressure control, data acquisition, and communication equipment and would periodically send data ashore via a cellphone network. An approximately 25-foot boat would moor to the buoy for bi-monthly inspections. No equipment would remain at the mooring site following retrieval operations.

Task 7, following at-sea testing, would involve completion of a Design Assessment and Certification of the IMS. PCCI and Intelligent Moorings Limited (Ruthin, United Kingdom) would submit IMS design reports, drawings and parts list, and reports of previous laboratory and 1/10th scale at-sea test results to the American Bureau of Shipping Group (ABS Group; Spring, TX). ABS would utilize this data to confirm the prototype meets applicable industry standards and class requirements. PCCI also proposes to conduct a high load pull/break test of the IMS following the at-sea test. This test would be performed at an existing land-based test facility that routinely provides such services in accordance with industry standards. As a result, no facility modifications, ground disturbance, or construction are expected or covered under this ND. Task 8 would consist of final reporting activities.

Award activities would involve typical hazards associated with maritime operations, including the operation of potentially hazardous equipment and vessels, diving operations, and site-specific environmental hazards. Prior to at-sea testing, a safety plan would be developed containing activity hazard analyses. Divers employed for installation and retrieval activities would be certified commercial divers using the Association of Diving Contractors International industry standard procedures and safeguards. Additionally, to mitigate navigational risks, the IMS test site is located away from normal shipping channels. Furthermore, the presence of the surface buoy would be promulgated via the U.S. Coast Guard's (USCG's) periodic Local Notice to Mariners and the buoy would be marked with a light that complies with USCG requirements. Existing health, safety, and environmental policies and procedures would be followed to mitigate hazards to acceptable levels. Mitigated hazards would pose negligible risks to the public and environment. All activities would comply with existing federal, state, and local laws and regulations.

PCCI contacted the U.S. Army Corps of Engineers (USACE) to inquire about the application of a Nationwide Permit (NWP) for the buoy installation. USACE responded stating that the buoy installation would fall under a non-reporting NWP 5 for Scientific Measurement Devices and that the buoy should be marked in accordance with USCG standards. PCCI is responsible for adhering to all NWP 5 requirements put forth by the USACE Norfolk District.

DOE completed informal consultation via a Biological Evaluation (BE) with the National Marine Fisheries Service (NMFS) per Section 7 of the Endangered Species Act (ESA). The following species and critical habitats were included in the BE:

- Fin whale (Balaenoptera physalus)
- North Atlantic right whale (Eubalaena glacialis)
- Green turtle (Chelonia mydas)
- Kemp's ridley turtle (Lepidochelys kempii)

• Leatherback turtle (Dermochelys coriacea)
• Loggerhead turtle (Caretta caretta)
• Atlantic sturgeon (Acipenser oxyrinchus oxyrinchus)
• Shortnose sturgeon (Acipenser brevirostrum)
• Giant manta ray (Mobula birostris)
• Critical habitat: Atlantic sturgeon (Acipenser oxyrinchus oxyrinchus)

DOE received a letter of concurrence (LOC; 09/19/2024) from NMFS stating their concurrence that award activities may affect but are not likely to adversely affect ESA-listed species or critical habitat under their jurisdiction and that no take is anticipated or exempted. The LOC indicated that no further consultation pursuant to Section 7 of the ESA is required unless (a) new information reveals effects of the action that may affect listed species or critical habitat in a manner or extent not previously considered in the consultation; (b) the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the consultation or; (c) a new species is listed or critical habitat designated that may be affected by the identified action.

DOE also completed essential fish habitat (EFH) consultation with NMFS per the Magnuson-Stevens Fishery Conservation and Management Act and the Fish and Wildlife Coordination Act. The following federally managed species were considered*:
• Atlantic sharpnose shark (Rhizoprionodon terraenovae)
• Albacore tuna (Thunnus alalunga)
• Bluefish (Pomatomus saltatrix)
• Bluefin tuna (Thunnus thynnus)
• Black sea bass (Centropristis striata)
• Long-finned inshore squid (Doryteuthis pealeii)
• Sandbar shark (Carcharhinus plumbeus)
• Summer flounder (Paralichthys dentatus)
• Windowpane flounder (Scophthalmus aquosus)
• Scup (Stenotomus chrysops)
• Yellowfin tuna (Thunnus albacares)
• Atlantic herring (Clupea harengus)
• *Additional species were considered for this consultation. Only the ones specifically mentioned by NMFS are provided above.

The EFH LOC (09/26/2024) indicated that NMFS concurred that potential adverse effects to EFH are likely to be temporary. However, they expressed concern that the proposed project may result in adverse impacts to high relief sand ridge and trough habitats as well as associated heterogeneous complex habitats that support important federally managed species and their prey. To avoid effects to these sensitive habitats, NMFS provided the following conservation recommendations (CRs):

1. Complete site investigation surveys to ground-truth the project area and identify the presence of any sensitive benthic habitats.
2. Avoid placing anchors or conducting any bottom disturbance activities in areas characterized by stable, spatially complex, high-relief sand ridges and troughs, and other sensitive benthic habitats.
3. Reinitiate consultation with NMFS, should the anticipated project disturbances be greater than anticipated, if site investigation surveys identify the presence of sensitive benthic habitats that may be disturbed, or if site investigation surveys identify the need for boulder relocation activities prior to placing the cable.

In response to the NMFS CRs, PCCI provided a report on the “Virginia Beach offshore sediment study” (i.e., Berquist study) indicating that all soil samples taken near the vicinity of the proposed test site contain only sand and no gravel, rock, or shell substrates. Additionally, during the summer of 2024, Marine Solutions conducted a visual site inspection of the seabed at the proposed test site and confirmed that the seabed was composed of sand or fine sand that was uniformly gray in color and did not contain any complex habitats or benthic features such as substrates, vegetation, lumps, banks, and scarfs. NMFS responded on 09/30/2024 confirming that the site investigation from 2024 coupled with the data presented in the Berquist study adequately addresses the ground truthing recommendations in CR #1. PCCI also stated their commitment to adhere to CR #2 and #3 in their response to NMFS. As indicated by the LOC, adherence to the CRs and implementation of the proposed management practices put forth by the BE would avoid, minimize, and offset adverse impacts to EFH as a result of the proposed project.

DOE has considered the scale, duration, and nature of proposed activities to determine potential impacts on resources, including those of an ecological, historical, cultural, and socioeconomic nature. DOE does not anticipate impacts on these resources which would be considered significant or require DOE to consult with other agencies or stakeholders aside from consultation that have already been mentioned.

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 4
Tasks 6 – 8 of Subaward to PCCI, Inc.

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

Budget Period 1
Budget Period 2
Budget Period 3
Tasks 0 – 5 of Subaward to PCCI, Inc.

Include the following condition in the financial assistance agreement:

The surface buoy associated with the Intelligent Mooring System (IMS) installation falls under a U.S. Army Corps of Engineer non-reporting Nationwide Permit (NWP) 5. The buoy must be marked in accordance with U.S. Coast Guard (USCG) standards, see General Condition 1b., and must comply with all other NWP 5 requirements.

To mitigate navigation risks, the IMS test site will be located away from normal shipping channels and the presence of the surface buoy will be promulgated via the USCG's periodic Local Notice to Mariners.

Reinitiation of Section 7 of the Endangered Species Act consultation with the National Marine Fisheries Service (NMFS) is required if:
1. New information reveals effects of the action that may affect listed species or critical habitat in a manner or extent not previously considered in the consultation;
2. The identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the consultation or;
3. A new species is listed, or critical habitat designated that may be affected by the identified action.

NMFS Essential Fish Habitat Conservation Recommendations:
1. Complete site investigation surveys to ground-truth the project area and identify the presence of any sensitive benthic habitats.
2. Avoid placing anchors or conducting any bottom disturbance activities in areas characterized by stable, spatially complex, high-relief sand ridges and troughs, and other sensitive benthic habitats.
3. Reinitiate consultation with NMFS, should the anticipated project disturbances be greater than anticipated, if site investigation surveys identify the presence of sensitive benthic habitats that may be disturbed, or if site investigation surveys identify the need for boulder relocation activities prior to placing the cable.

Notes:

Wind Energy Technologies Office (WETO)
This NEPA determination requires legal review of the tailored NEPA provision.
NEPA review completed by Corrin MacLuckie, 09/30/2024.

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.

DOE has determined that work to be carried out outside of the United States, its territories and possessions is exempt from further review pursuant to Section 5.1.1 of the DOE Final Guidelines for Implementation of Executive Order 12114; "Environmental Effects Abroad of Major Federal Actions."

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: Matthew Blevins Date: 10/1/2024

NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

- [x] 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