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 Procurement Instrument Number** NEPA Control Number CID Number DE-FOA-0001767 DE-EE0008390 GFO-0008390-028 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.)

#### 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 General Electric Research (GE Research).

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 GE Research would develop the conceptual design for a direct current (DC) collection and transmission system for offshore wind applications. GE Research would model the relevant parameters for the proposed system, including operating system voltage, turbine sizes and aggregation level, system configuration, and converter topologies. The conceptual design for the system would then be developed based on this modeling effort.

Proposed project activities would consist of conceptual design work, data analysis, computer modeling, and engineering research. All project work would be coordinated by GE Research. Project partner Rensselaer Polytechnic Institute would also participate in the performance of all the above mentioned task activities. No physical modifications to existing facilities, ground disturbance, or changes to the use, mission, or operations of existing facilities would be required. No additional permits or authorizations would be required.

Because project activities would consist solely of computer based research and analysis, no significant health or safety risks are anticipated. Nonetheless, GE Research and Rensselaer Polytechnic Institute would adhere to established institutional health and safety policies and procedures when performing project work. GE Research and Rensselaer Polytechnic Institute 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 GE Research

The NEPA Determination does not 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, 06/09/2021

## 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:	Signed By: Roak Parker  NEPA Compliance Officer	Date:	6/10/2021
FIELD OFFICE MANAGER DETERMINA	TION		
<ul><li>✓ Field Office Manager review not required</li><li>☐ Field Office Manager review required</li></ul>			

# BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO:

Field Office Manager's Signature:		Date:	
	Field Office Manager		