

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-0008390-029	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.)

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 Esteyco, S.A.

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 Esteyco would develop a novel installation technology for offshore wind turbine applications. The "Elisa" substructure technology would be designed for use in the installation and assembly of offshore turbine components utilizing conventional tug boats.

Project work would include tank testing of a prototype version of the Elisa technology (Task 6). However, a site location has not yet been selected for tank testing activities. Accordingly, Task 6 and all subsequent activities (Tasks 7-11), which are dependent on tank testing, will be excluded from this review until a site has been selected and all relevant information has been submitted to DOE for review. This ND will be applicable to Tasks 0 – 5.

**Task 0 – Project Management and Reporting:** This task would be ongoing throughout the project and would consist of the performance of administrative functions relating to the management of the project. These would include stakeholder engagement, budget/financial management, and reporting activities.

**Task 1 – High-level screening of the potentially available facilities on the US east coast:** This task would consist of a market analysis of potential manufacturing sites for the production of the Elisa substructure, as well as potential sites for offshore wind turbine installations. Task 1 activities would be fully computer-based and would not involve any

manufacturing or installation work.

Task 2 – Towing & Installation (T&I) analysis for the conceptual design: This task would consist of an engineering assessment of the installation capabilities of existing U.S. vessels, utilizing the proposed Elisa substructure. A computer-based simulation would be developed to inform the analysis.

Task 3 – Development of a conceptual design for the 15MW reference turbine and representative metocean conditions off the US east coast: This task would consist of the selection of a representative site for the installation of a 15 MW turbine using the proposed Elisa hardware. Once selected, data would be collected on the environmental characteristics of the site. Different turbine installation methods would also be assessed in the context of the representative site. All work activities to be performed would be computer-based. No on-site sampling or analysis would occur. No physical installation work would occur.

Task 4 – Evaluation of the cost and logistics of fabricating and installing projects using the ELISA technology: This task would consist of a Levelized Cost of Energy analysis of Elisa substructure fabrication and installation work. These processes would be modeled utilizing computer simulation tools and techniques.

Task 5 – Ballasting system industrial design and tank testing site selection: This task would consist of conceptual design work of one of the sub-components of the Elisa substructure; the ballasting system. Modeling work carried out as part of Task 3 would be used to inform the conceptual design. Esteyco would also engage with potential manufacturers/suppliers of the Elisa hardware. However, no fabrication work would be performed as part of this task. Additionally, Esteyco, in coordination with the National Renewable Energy Laboratory (NREL), would select a site for tank testing to be performed as part of Task 6, which would be completed at a future date after it has received a NEPA review from DOE.

All of the above mentioned tasks would consist solely of computer-based research and stakeholder engagement. No physical experimentation would be performed. Esteyco would coordinate and perform analysis, modeling and stakeholder engagement activities at its offices in Madrid, Spain. Its project partner, NREL, would also perform analysis and modeling work at its laboratory facilities in Golden, CO.

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  
Tasks 0-5 of Sub Award to Esteyco, S.A.

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

Tasks 6-11 of Sub Award to Esteyco, S.A.  
Budget Period 4

Notes:

This NEPA determination does require a tailored NEPA provision  
Wind Energy Technology Office  
Review completed by Jonathan Hartman, 07/21/2021

## 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: \_\_\_\_\_

 **Electronically Signed By: Roak Parker**  
NEPA Compliance Officer

Date: 7/21/2021

**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: \_\_\_\_\_