



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

290 BROADWAY  
NEW YORK, NY 10007-1866

August 10, 2022

Jill Lewandowski  
Office of Environmental Programs  
Bureau of Ocean Energy Management

RE: Programmatic Environmental Impact Statement for Future Wind Energy Development  
in the New York Bight

Dear Ms. Lewandowski,

The U.S. Environmental Protection Agency (EPA) has reviewed the request by Bureau of Ocean Energy Management (BOEM) to provide scoping comments in anticipation of the preparation of a Programmatic Environmental Impact Statement (PEIS) for New York Bight. In accordance with EPA's responsibilities pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality regulations (40 CFR Sections 1500-1508) and Section 309 of the Clean Air Act, we are providing the following thoughts.

The New York Bight offshore wind projects include the development of over 488,000 acres consisting of six different lease areas. This development could result in a wide range of direct, indirect (secondary), and cumulative impacts to resources that are within EPA's areas of jurisdiction and expertise. Our scoping comments are offered to help BOEM develop a comprehensive PEIS that informs the programmatic avoidance, minimization, mitigation and monitoring (AMMM) measures to be developed. The attached comments are also intended to be consistent with our ongoing work in the Region to support local communities and reduce environmental impacts.

In addition to close coordination with New York, New Jersey, and the affected local communities, we recommend that BOEM continue to work closely with federal agencies and tribes with relevant air, water, and natural resource responsibilities during the development of the PEIS. We encourage BOEM to be particularly attentive to the concerns of the fishing industry and state and federal agencies charged with protecting fishing and marine mammal resources.

Thank you for the opportunity to provide scoping comments as part of the NEPA process for the New York Bight PEIS. As part of the BOEM NEPA process, EPA is willing to serve as a cooperating agency in support of BOEM's continuing efforts on the project, and in that role, review draft documents and attend coordination meetings as appropriate and as resources permit. We believe the issues identified below can be fully addressed in the NEPA process and we are willing to work with your agency to develop a strategy to achieve that goal. Should you have questions on our comments noted above or related to this project, please contact *Anne Rosenblatt Schaffer* at 212-637-4347 or [rosenblatt.anne@epa.gov](mailto:rosenblatt.anne@epa.gov).

Sincerely,

*Mark Austin*

Mark Austin, Team Lead  
Environmental Review Team

## **EPA Detailed Comments**

### **Programmatic Environmental Impact Statement for Future Wind Energy Development in the New York Bight August 10, 2022**

#### **General Comments:**

We recommend using EPA's NEPAAssist web-based application tool for this project as well as for future projects to facilitate the environmental review process and aid in project planning. NEPAAssist is a useful tool for identifying environmental resources in the area and can indicate potential environmental issues at the earliest stage of project development. Please visit the NEPAAssist website at: <https://www.epa.gov/nepa/nepassist>.

#### **Purpose and Need:**

The PEIS should clearly explain the rationale for a tiered environmental review process for the New York Bight Offshore Wind development. The purpose and need along with the scope of the analysis must be clearly stated for a meaningful review process.

#### **Proposed Action and Alternatives:**

EPA recommends that BOEM use this PEIS to holistically evaluate AMMM measures for all lease areas as practicable.

The language used regarding the Proposed Action and the No Action alternative in the Notice of Intent (NOI) and issued documents is inconsistent and may lead to confusion. The Proposed Action is stated to consider "the change in potential impacts resulting from the AMMM measures."<sup>1</sup> The No Action alternative is defined to consider "no development of the lease areas in the NY Bight."<sup>2</sup> The No Action alternative is supposed to serve as a comparative tool for the Proposed Action, but currently allows for little understanding of efficacy of the AMMM measures of the Proposed action. EPA recommends redefining the Proposed Action to include the development of the lease areas with no AMMM measures and include the implementation of different AMMM measures in other alternatives.

#### **Representative Project Design:**

The current Proposed Action relies on the analysis of a representative project in the NY Bight to investigate the potential impacts and AMMM measures. The EPA recommends BOEM to take this opportunity to consider the development of the entirety of the New York Bight lease areas and the potential impacts in the PEIS for a more holistic understanding of impacts that require minimization and mitigation.

Further, the PEIS should consider specific resource categories and design considerations across all lease areas. For example, the PEIS should consider Wind Turbine Generator (WTG) layout and spacing that are sensitive to impacts on fishing, vessel operations and transit corridors. Efforts should be made to develop the area, with respect to neighboring wind farms, to maximize efficiency and avoid impacts associated with adjacent projects. To this end, the PEIS should further evaluate the potential for common cable corridors for neighboring projects that could reduce impacts to marine resources. Additionally, EPA recommends that BOEM carefully consider optimizing the wind farm layout with respect to spacing and orientation of adjacent WTGs such that turbulent flow

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<sup>1</sup> [https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/87-FR-42495\\_0.pdf](https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/87-FR-42495_0.pdf)

<sup>2</sup> [https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/87-FR-42495\\_0.pdf](https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/87-FR-42495_0.pdf)

and wake effects, which reduce overall project efficiency, are minimized.

Analysis of the representative project design should take into consideration that certain New York Bight lease areas are adjacent to offshore wind projects that are further along in development, such as Ocean Wind and Atlantic Shores.

The representative project considered as a basis of analysis should include a broad scope of design elements and potential impacts to ensure AMMM measures cover a range of scenarios that might be encountered in individual development projects. For instance, multiple scenarios for cable routes should be considered as applicable to cover the range of possible impact scenarios.

### **Air Quality:**

To determine if any New York Bight project activities would result in potential air quality impacts we recommend the PEIS consider sources of pollution that would cause adverse impacts on air quality values in Federal Class I, sensitive Class II or state wilderness areas; potential violations of any state or federal ambient air quality standards; and assess exposure of nearby populations to increased level of air toxins.

To the extent practicable, the PEIS should consider potential air quality impacts during construction, operation & maintenance, and decommissioning of the representative project. For ease of public review and understanding, EPA recommends that the PEIS contain quantitative summary tables comparing the modelled concentrations to the National Ambient Air Quality Standards (NAAQS), state air quality standards, or other relevant reference measures. Locating the receptors at the state seaward boundary provides information on whether the NAAQS are protected and ensure that the air quality within this nearshore area is not adversely impacted by Outer Continental Shelf (OCS) activity. Additionally, the PEIS should evaluate the cumulative air quality impacts associated with the full build of the New York Bight Lease areas.

The PEIS should also explicitly disclose emissions associated with operation of WTGs (for example, to start up WTGs power is extracted from the existing electrical grid) and other project components or facilities that rely on generator engines as emergency backup power.

Additionally, if possible, the PEIS should incorporate options that explore diesel controls, cleaner fuel and construction practices for equipment used for transportation, sediment movement, or other activities, including the use of clean diesel through add-on control technologies such as diesel particulate filters and diesel oxidation catalysts, repowers, or newer, cleaner equipment. Further detailed information on a broad range of cost-effective technologies and practices that improve operational efficiency and reduce emissions can be found through EPA's Natural Gas STAR Program.

Emissions of sulfur hexafluoride (SF<sub>6</sub>) are expected from gas-insulated switchgears on the wind turbine generators (WTG) and electric service platform (ESP). SF<sub>6</sub> is the most potent known greenhouse gas. Approximately 23,000 times more effective at trapping infrared radiation than carbon dioxide, SF<sub>6</sub> is also a very stable chemical, with an atmospheric lifetime of 3,200 years. Thus, a relatively small amount of SF<sub>6</sub> can have a significant impact on global climate change. The EPA recommends that best available technology would warrant consideration of available switchgears that are SF<sub>6</sub>-free ("clean-air"). If SF<sub>6</sub>-free switchgears are determined to be technically infeasible, BOEM should consider mitigation requirements for monitoring and leak detection

limiting leaks to less than 1%, especially given that there are projected to be a significant number of switchgears at each project and the switchgears will be operating in a harsh marine environment.

### **Greenhouse Gas Emissions:**

Executive Order 13990 (E.O. 13990, 86 FR 7037; January 20, 2021) urges agencies to “consider all available tools and resources in assessing GHG emissions and climate change effects of their proposed actions, including as appropriate and relevant, the 2016 GHG Guidance”. We recommend the PEIS identify sources of emission associated with the project, quantify projected short-term and long-term GHG emissions, and identify methods that would minimize GHG emissions from construction and operational activities. Estimated emissions serve as a useful proxy for assessing effects and comparing alternatives. Helpful tools that can be applied to estimate GHG emissions can be found at <https://ceq.doe.gov/guidance/ghg-accounting-tools.html>.

EPA recommends utilizing the interim social cost of greenhouse gas (SC-GHG) estimates established by the Interagency Working Group on SC-GHG. Monetizing the net climate damages of GHG emissions from net changes in direct and indirect emissions provides useful information to the public and decisionmakers.

EPA acknowledges the potential benefits associated with Offshore Wind development with respect to greenhouse gas reductions. EPA recommends that the PEIS incorporate an energy substitution analysis and clarify the assumptions made when calculating the emissions avoided, in particular, by specifying the changes to the resulting energy mix as energy resources are substituted for one another.

EPA recommends that BOEM include a discussion of how net greenhouse gas reductions would help meet relevant national and local climate action goals and commitments.

### **Climate Change:**

The EPA recommends that the PEIS include a discussion of reasonably foreseeable effects that changes in the climate may have on the proposed project and the project area. This could help inform the development of measures to improve the resilience of the proposed project. If projected changes could notably exacerbate the environmental impacts of the project, the EPA recommends these impacts also be considered as part of the NEPA analysis.

### **Water and Natural Resources:**

#### *Estuaries of National Significance*

Pursuant to Section 320 of the Clean Water Act (CWA) (33 U.S.C. 1330; as amended by P.L. 100-4 et seq.), the Barnegat Bay-Little Egg Harbor was established as an estuary of national significance. The Barnegat Bay Partnership (BBP), which comprises federal, state, and local government agencies, academic institutions, nongovernmental organizations, and businesses working together to restore and protect the Bay, recently revised its Comprehensive Conservation and Management Plan (CCMP) for Barnegat Bay-Little Egg Harbor Estuary (January, 2021). The CCMP identifies the following goals, all of which are meant to be considered/achieved in consideration of sea level rise, and includes objectives towards achievement of these goals:

- Water Quality – To protect and improve water quality throughout Barnegat Bay and its watershed by reducing the causes of water quality degradation to achieve swimmable, fishable, and drinkable water, and to support aquatic life.
- Water Supply – To ensure adequate water supplies and flow in the Barnegat Bay watershed for ecological and human communities now and in the future.
- Living Resources – To protect, restore, and enhance habitats in the Barnegat Bay and its watershed as well as ensure healthy and sustainable natural communities of plants and animals both now and in the future.
- Land Use – To improve and sustain collaborative regional approaches to responsible land use planning and open space preservation in the watershed that protect and improve soil function(s), water quality, water supply, and living resources.

EPA requests that BOEM keep in mind the CCMP goals and provide enough analysis of impacts to assure that the activities proposed will not affect achievement of the CCMP goals, especially in light of climate change.

***Vessel Discharges:***

Bilge water often includes oil, fuel, hydraulic fluid and other pollutants that are not permitted to be discharged into the ocean in any amount. EPA regulates discharges from certain nonrecreational vessels operating within the territorial seas through the Vessel General Permit. The US Coast Guard also has standards for vessels carrying ballast water within the waters of the U.S. (extending 12 nm from shore). We recommend that the PEIS include language that identifies both federal authorities regulating these discharges where applicable.

We also note that the discharge of ballast water from foreign vessels could introduce non-native marine organisms into US coastal waters. The PEIS should explain how vessel operations will prevent the discharge of pollutants from routine releases as well as potential releases of nonnative marine organisms through the discharge of ballast water originating from foreign ports--if such vessels will be used during the construction or maintenance of the project. It would be helpful if the PEIS describes how the project will be consistent with state requirements related to vessel discharges.

***Wetlands Impacts:***

In accordance with Executive Order 11990 Protection of Wetlands (E.O. 11990, 42 FR 26961; May 24, 1977), federal agencies are directed to minimize the destruction, loss, or degradation of wetlands and to preserve and enhance the natural beneficial values of wetlands. We recommend implementation of best management practices to reduce impacts to wetlands and to ensure soil grade is conserved. Additionally, the PEIS should assess impacts from the proposed activities that could result in a change (either permanent or temporary) of cover type within a wetland.

In accordance with the Section 404 of the Clean Water Act, impacts to streams and wetlands should be avoided or minimized. Once a preferred alternative is identified, more detailed information will be needed to assess impacts. As part of this assessment, all aquatic resources on or immediately surrounding the site should be delineated and characterized. The extent of streams should be mapped and wetlands on the site should be delineated according to the 1987 Corps of Engineers Wetlands Delineation Manual (“the 1987 Manual”) and the Regional Supplement.

Further, EPA recommends a conclusive evaluation of cumulative effects of onshore activities at a watershed scale (i.e. HUC 12) be provided to ensure that measures are undertaken to avoid and minimize the potential of cumulative impacts.

***Discharge Permits:***

It is probable that some construction and operation activities may result in discharges requiring National Pollutant Discharge Elimination System authorization. It would be helpful if the PEIS contains information to specifically determine whether the Project will result in discharges of pollutants to waters of the United States requiring authorization.

***Endangered/Protected Species:***

With respect to potential impacts on aquatic and terrestrial species, we recommend consultation with the U.S. Fish and Wildlife Service in accordance with Section 7 of the Endangered Species Act (ESA). The Information for Planning and Consultation (IPaC) digital project planning tool can be used to identify potential vulnerabilities that should be addressed in the PEIS. This tool can be found here: <https://ecos.fws.gov/ipac/>.

***Habitat/Marine Life:***

Habitat impacts associated with development of the lease area, as well as the benefits provided by development of the Wind Energy Area should be evaluated. A portion of the PEIS should include the cumulative impacts from OSW activities in all the lease areas on marine and aquatic resources. This should also include a discussion of the effect of the Proposed Action on marine wildlife during both the construction and maintenance/operation of the project. Collecting and gathering new or recent data on marine wildlife and habitats should be considered a priority. Furthermore, continuous monitoring of wildlife and habitats as part of the Proposed Action is recommended. With respect to all marine impact EPA recommends that BOEM consult closely with the applicable state, federal and local agencies.

**Spill Prevention, Containment and Countermeasure Plan (SPCC):**

With regards to accidental releases and spills of hazardous materials, it is recommended that the issue be considered a long-term impact, so long that the expected risk of an accidental spill during construction and operation of the Proposed Actions are reasonably likely. The impact of a single accidental release may be negligible/minor and short-term, but the prevailing possibility of future accidental releases warrants the consideration that the issue of spills and accidental releases be viewed as long-term. As such, mitigation measures and a SPCC should be included in the PEIS.

**Construction Means & Methods:**

EPA encourages the use of green construction practices whenever possible, including recycling of construction material for both use and disposal, environmentally friendly landscaping, green infrastructure and incorporation of energy-efficient technologies.

**Indian Nation Issues and Coordination:**

If there are federally recognized Tribes that are expected to be affected by the activities described in the PEIS, we recommend the PEIS include a description of the process and outcomes of consultations with tribal governments.

**Environmental Justice and Impacted Communities:**

EPA has a strong commitment to promote the principles of environmental justice outlined in Executive Order 12898 - Federal Actions to Address Environmental Justice in Minority and Low-income Populations. According to the Executive Order, “Each Federal Agency shall analyze the environmental effects, including human health, economic and social effects, of Federal actions, including effects on minority communities and low-income communities, when such analysis is required by NEPA. Mitigation measures outlined or analyzed in an environmental assessment, environmental impact statement, or record of decision, whenever feasible, should address significant and adverse environmental impacts of proposed Federal actions on minority communities and low-income communities.”

The Council on Environmental Quality, which oversees implementation of NEPA, has promulgated a guidance document to assist agencies in implementing environmental justice principles (See Environmental Justice Guidance under the National Environmental Policy Act, Council on Environmental Quality, December 10, 1997).

The locations of the substations and the routes of the cables should be analyzed with regard to Environmental Justice to ensure that vulnerable communities are not disproportionately affected. We recommend utilizing support tools such as the EPA’s Environmental Justice Screening and Mapping Tool (EJSCREEN, available at <https://ejscreen.epa.gov/mapper/>) to consider possible impacts on vulnerable adjacent communities.

Surrounding populations that may be impacted by construction and operations of onshore components and facilities. EPA recommends that noise, air, lighting, and traffic impacts to the community from construction and project operations be considered in the PEIS.

**Community Outreach:**

EPA appreciates being included in the efforts that BOEM has already begun to engage stakeholder groups in developing a path forward for future public outreach. EPA recommends that BOEM develop a Community Outreach Plan, to be included in the PEIS and future NEPA documents, that includes details of future engagement efforts and commitments to involve the public as the project proceeds. Engaging early in the PEIS process will allow for the public to provide input on mitigation and minimization measures for the overall New York Bight development. In developing this outreach EPA encourages BOEM to ensure that material and meetings are accessible to the broader community including linguistically isolated communities.

**Visual Impacts**

The visual impacts caused by the turbines should be addressed in the PEIS. This should include which communities/parks the turbines may be visible from, the extent to which the turbines are visible, the weather conditions in which they are visible, and a prediction of how often the turbines would be visible throughout the year. If possible, the cumulative effects of visual impacts from adjacent lease areas and Offshore Wind projects should be evaluated.

**Analysis of Indirect and Cumulative Impacts:**

The Council on Environmental Quality NEPA regulations (Section 1508.1 (g)) effective as of May 2022 define effects or impacts to mean “changes to the human environment from the proposed action or alternatives that are reasonably foreseeable.” This definition includes cumulative effects,

which are “effects on the environment that result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such actions.” Indirect effects, which are caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

The PEIS should include and analyze impacts from current and reasonably foreseeable projects and activity near the New York Bight lease areas. We recommend that the analysis clearly identify the resources that may be cumulatively impacted, the timeframe for the impacts and the geographic extent of impacts caused by the proposed project. For resources analyzed, we encourage BOEM to include: a description of the current condition of the resource; current trends regarding the condition of the resource; and a discussion of likely future conditions of the resource based on the consideration of current conditions, trends, and other reasonably foreseeable projects. For all resources considered it would also be helpful if the analysis links the potential for cumulative impacts to the long-term health of the resource under consideration. Where adverse cumulative impacts are identified, BOEM should make it clear which parties will be responsible for avoiding, minimizing, and mitigating those adverse impacts. We recommend that the analysis specifically focus on impacts to endangered species and marine related commerce including commercial fishing.

We also recommend that the cumulative impact analysis examine the landside effects of noise to residential and commercial buildings near the port facilities. Existing port facilities may already experience higher than normal noise levels, and additional noise may increase cumulative impacts. Development of the New York Bight Offshore Wind Area is expected to increase vessel traffic and port utilization. It may also require port related construction activities to support these increases. Both of these potential indirect impacts should be considered in the PEIS.